PRINT OF DRAWINGS
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[redacted]

8/941,466

09941466 - 090800

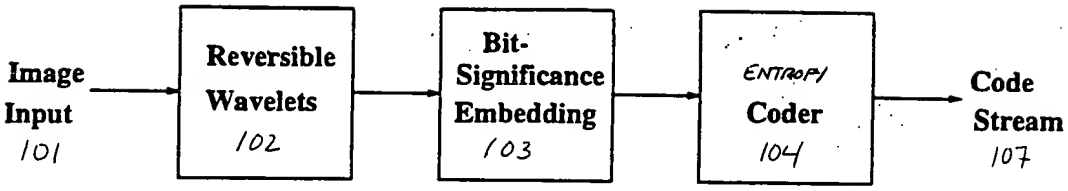


FIGURE 1A

JC05 Rec'd PCT/PTO 09 SEP 1998

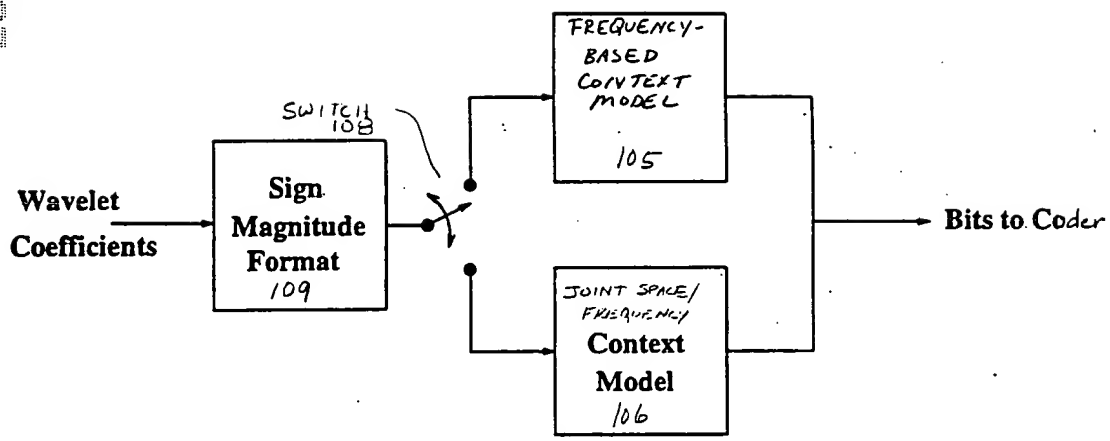


FIGURE 1B

PRINT OF DRAWINGS
AS ORIGINALLY FI



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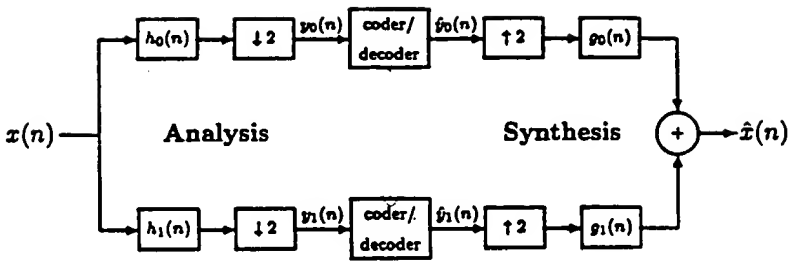



FIGURE 2A

PRINT OF DRAWINGS
AS ORIGINALLY F



09310141 - 960926

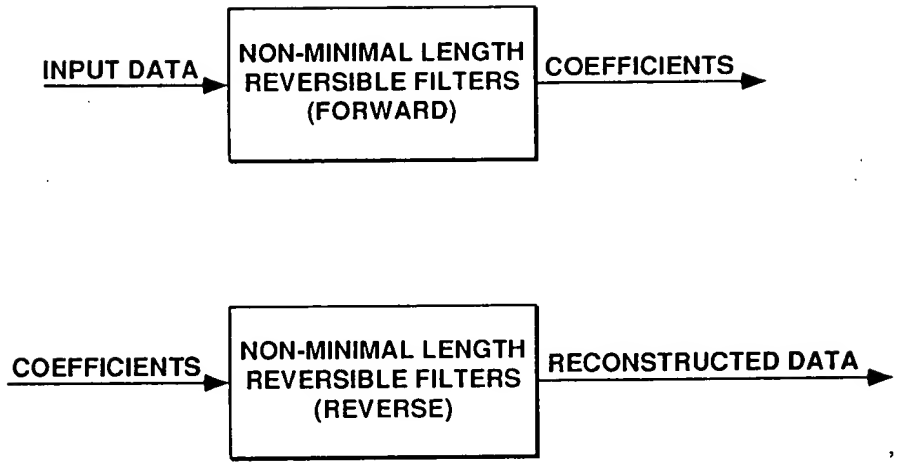



*Figure 2B*

PRINT OF DRAWINGS AS ORIGINALLY FILED

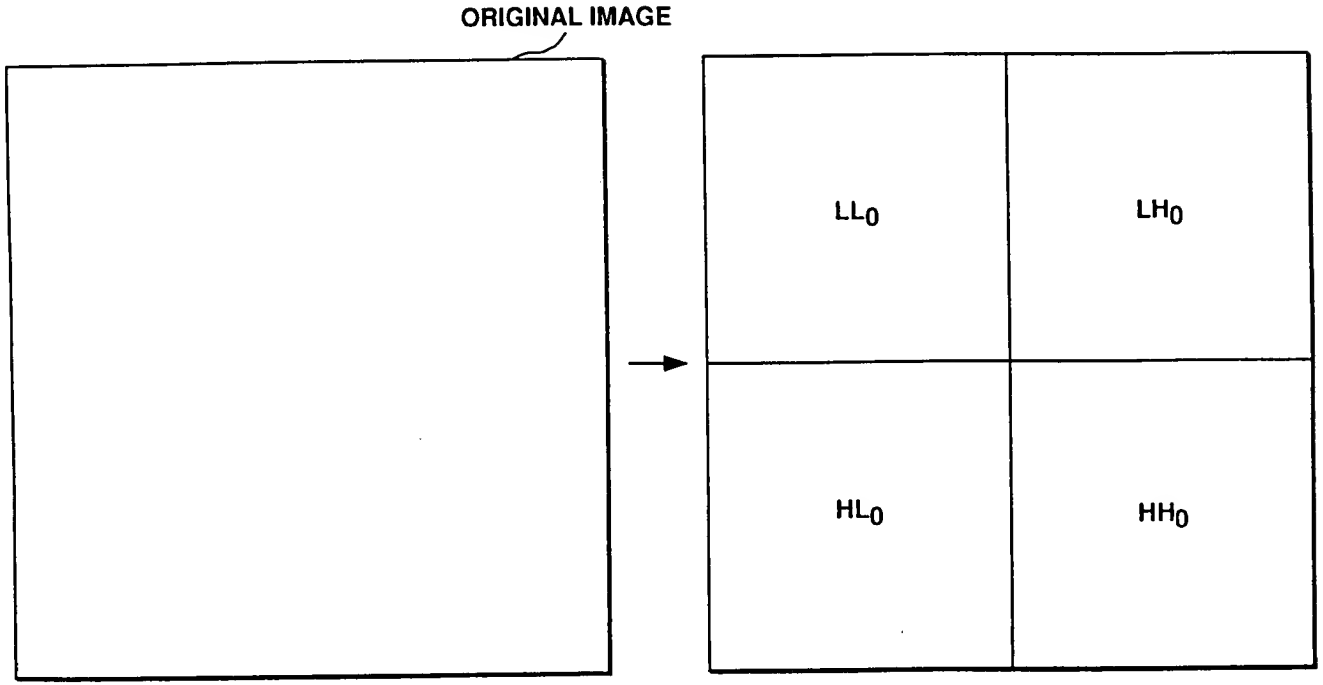



*Figure 3A*

08/310141

PRINT OF DRAWINGS
AS ORIGINALLY F



09941465 .09310697

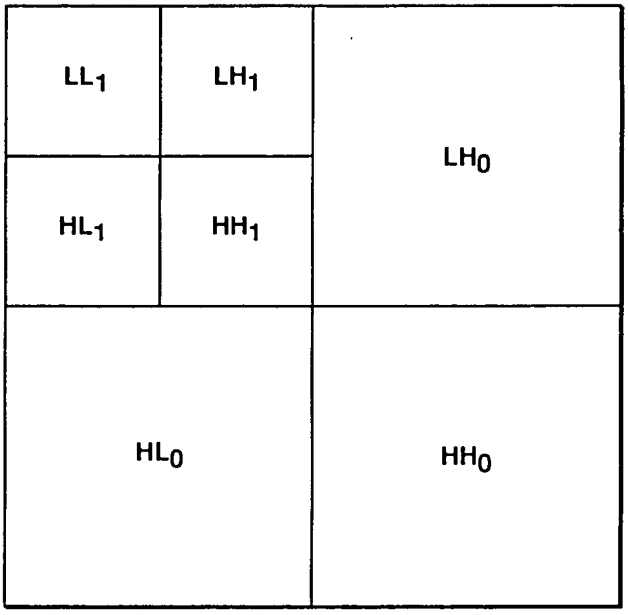



*Figure 3B*

PRINT OF DRAWINGS
AS ORIGINALLY F



09/10/98, 09:34:00

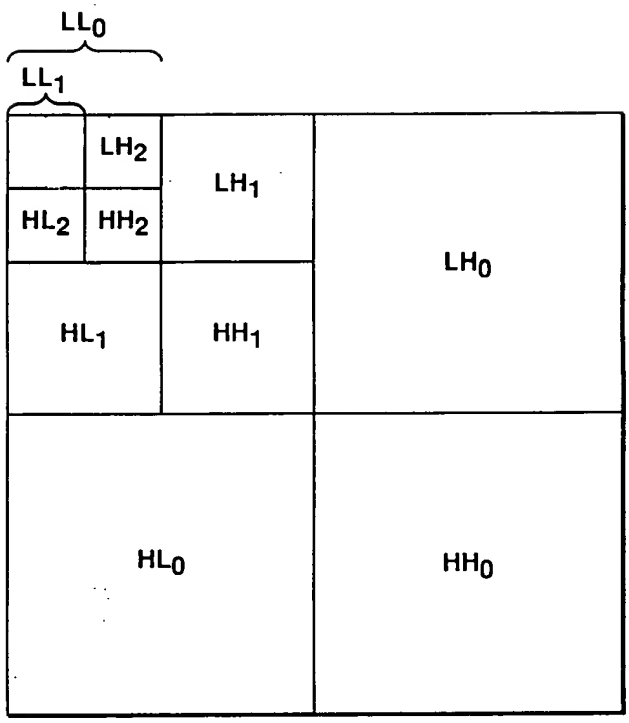



*Figure 3C*

PRINT OF DRAWINGS
AS ORIGINALLY FT



7605650 "9h1+650

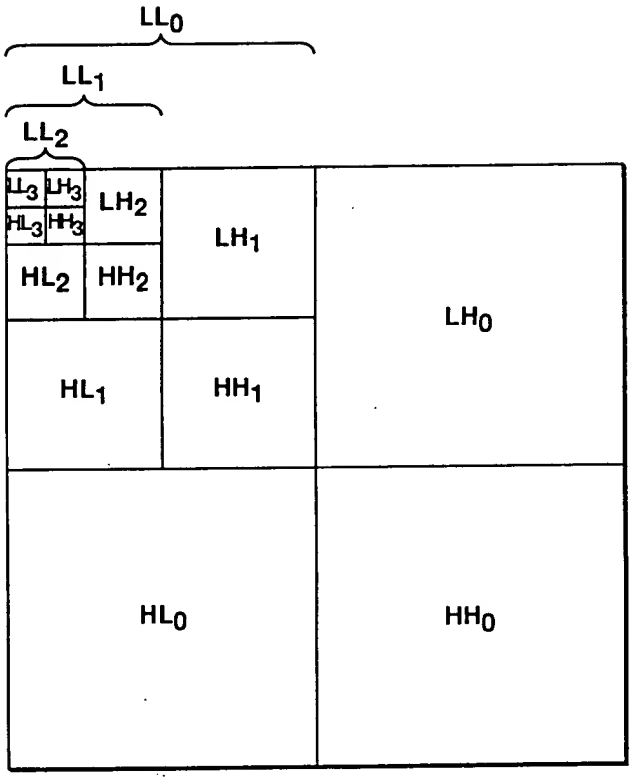



*Figure 3D*

PRINT OF DRAWINGS
AS ORIGINALLY FI



Jeosad.ssd+ssd

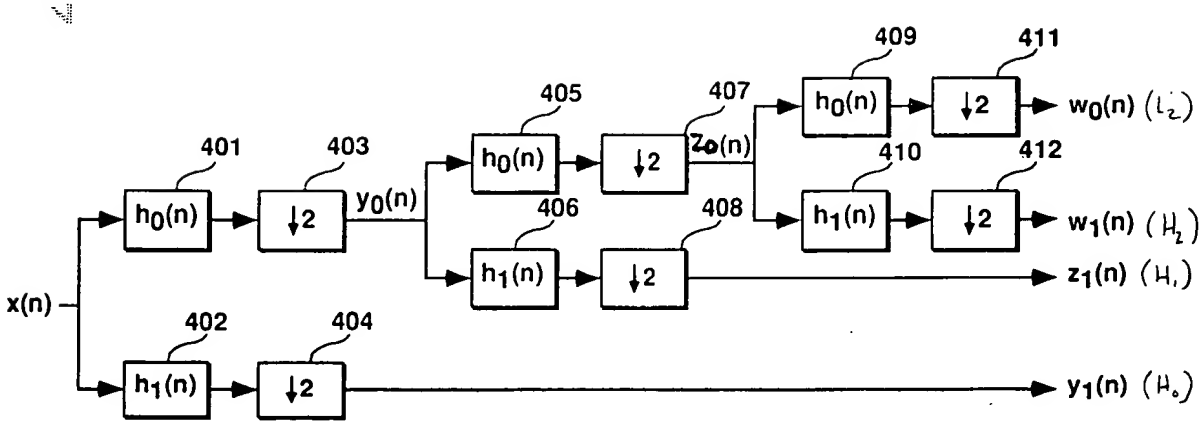



*Figure 4A*

PRINT OF DRAWINGS
AS ORIGINALLY FI



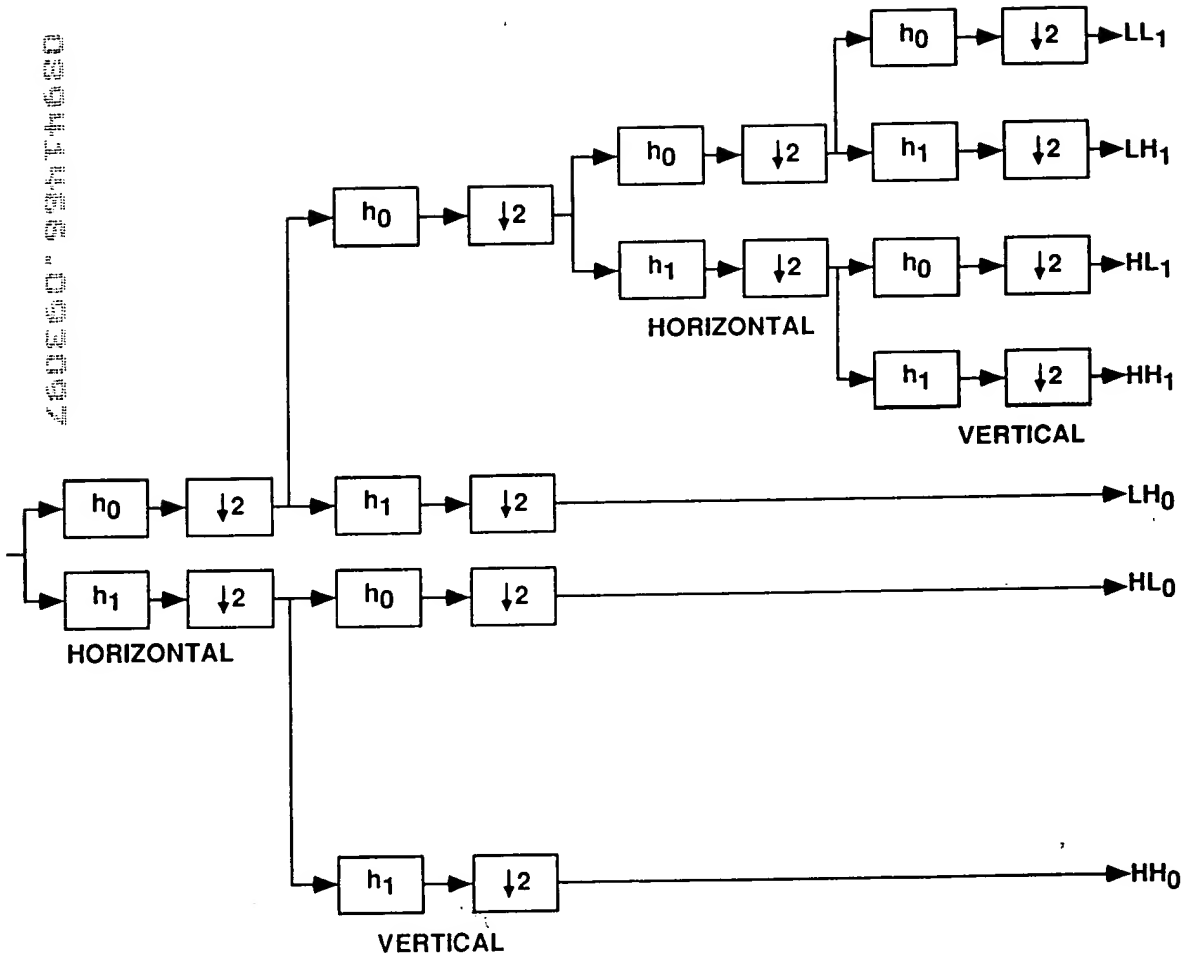



*Figure 4B*

PRINT OF DRAWINGS
AS ORIGINALLY F



08/310141 - 09/15/95

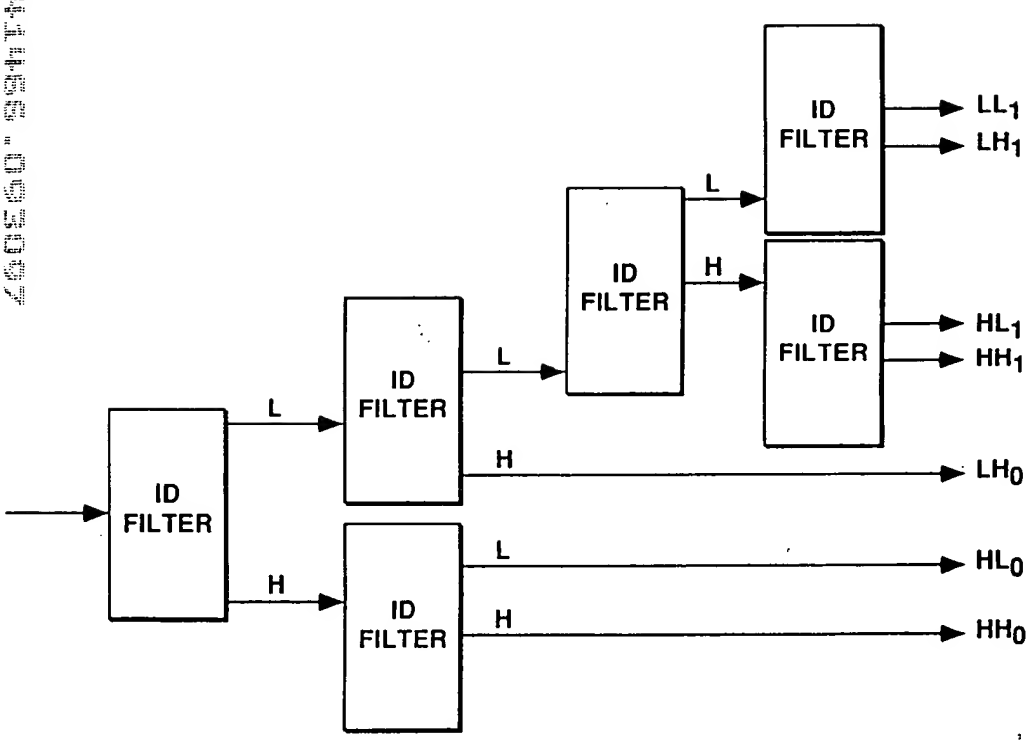



*Figure 4C*

08/310,411

PRINT OF DRAWINGS AS ORIGINALLY F

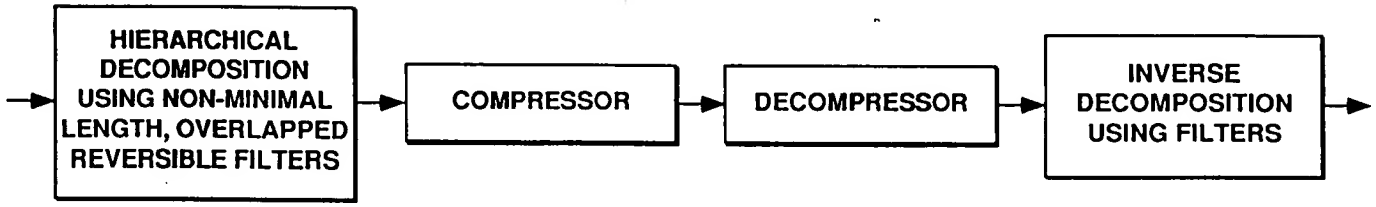



*Figure 4D*

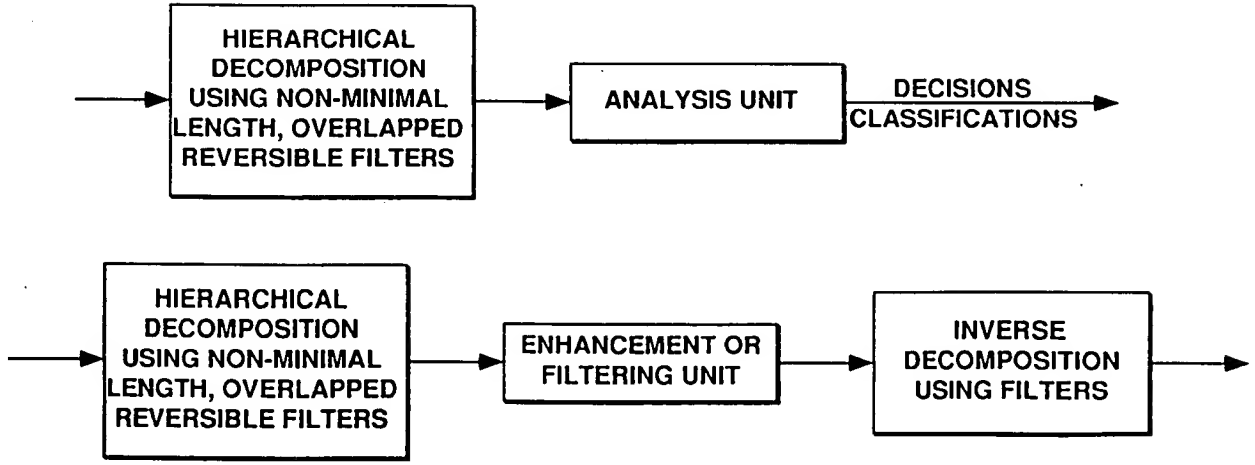



*Figure 4E*

PRINT OF DRAWINGS
AS ORIGINALLY FI



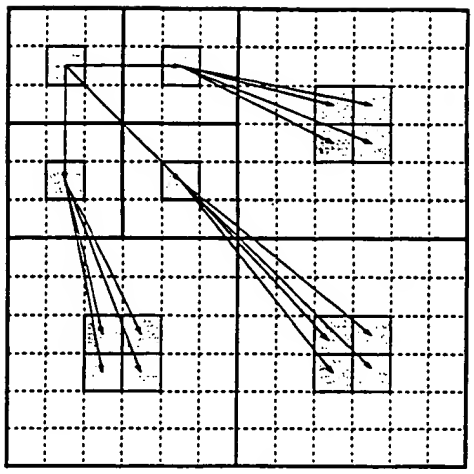


Figure 5

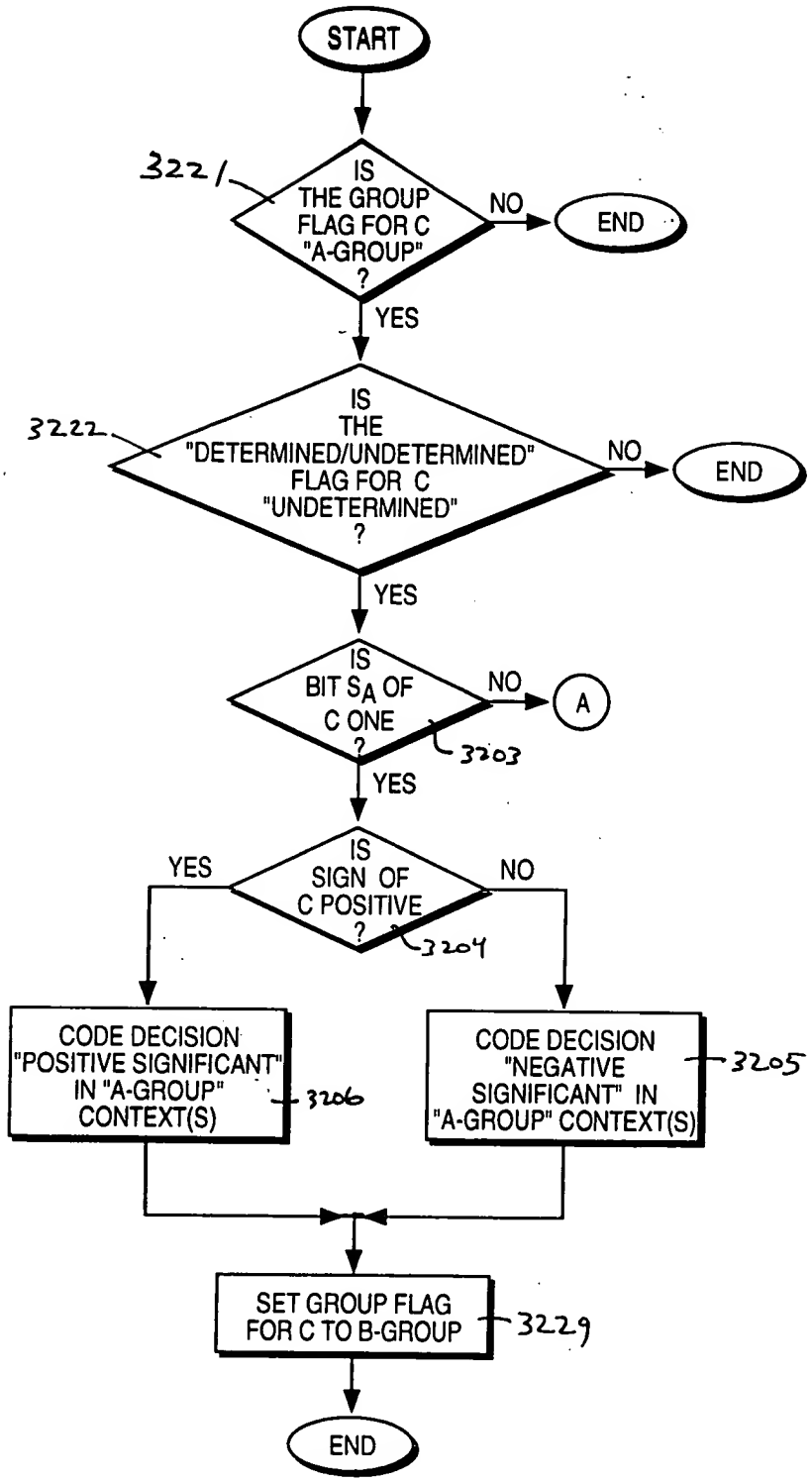

START
3221
IS THE GROUP FLAG FOR C "A-GROUP" ?
NO
END
YES
3222
IS THE "DETERMINED/UNDETERMINED" FLAG FOR C "UNDETERMINED" ?
NO
END
YES
IS BIT $S_A$ OF C ONE ?
NO
A
3203
YES
IS SIGN OF C POSITIVE ?
YES
NO
3204
CODE DECISION "POSITIVE SIGNIFICANT" IN "A-GROUP" CONTEXT(S)
3206
CODE DECISION "NEGATIVE SIGNIFICANT" IN "A-GROUP" CONTEXT(S)
3205
SET GROUP FLAG FOR C TO B-GROUP
3229
END

FIG. 6a

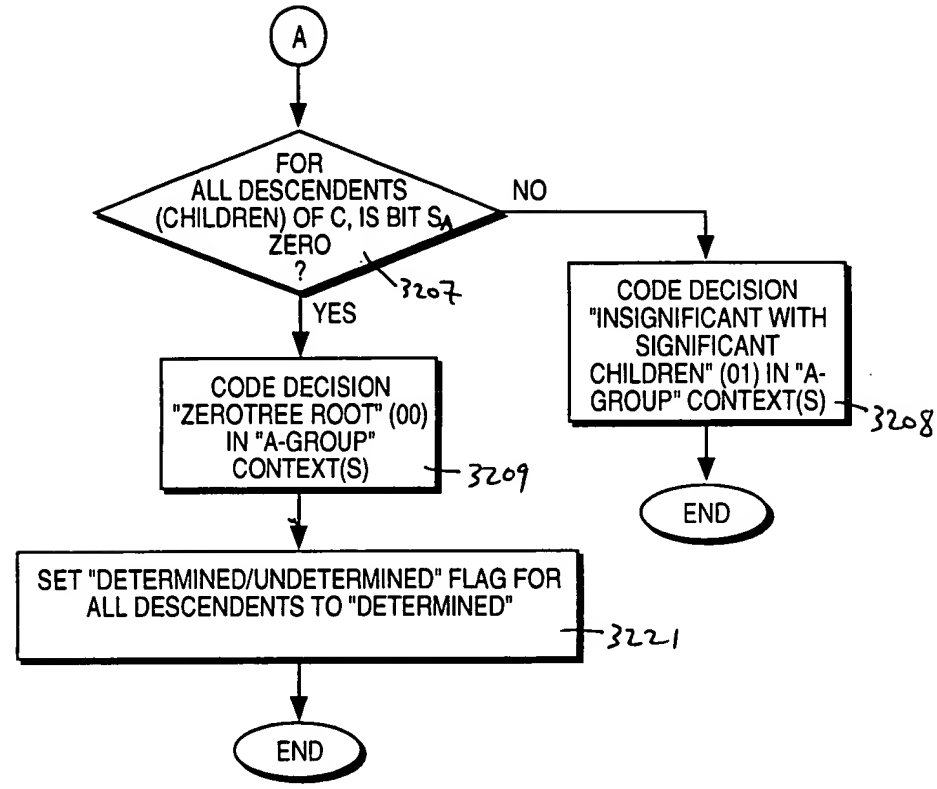

A
FOR ALL DESCENDENTS (CHILDREN) OF C, IS BIT $S_A$ ZERO ?
3207
NO
YES
CODE DECISION "INSIGNIFICANT WITH SIGNIFICANT CHILDREN" (01) IN "A-GROUP" CONTEXT(S)
3208
CODE DECISION "ZEROTREE ROOT" (00) IN "A-GROUP" CONTEXT(S)
3209
END
SET "DETERMINED/UNDETERMINED" FLAG FOR ALL DESCENDENTS TO "DETERMINED"
3221
END

**FIG. 6a** (cont'd.)

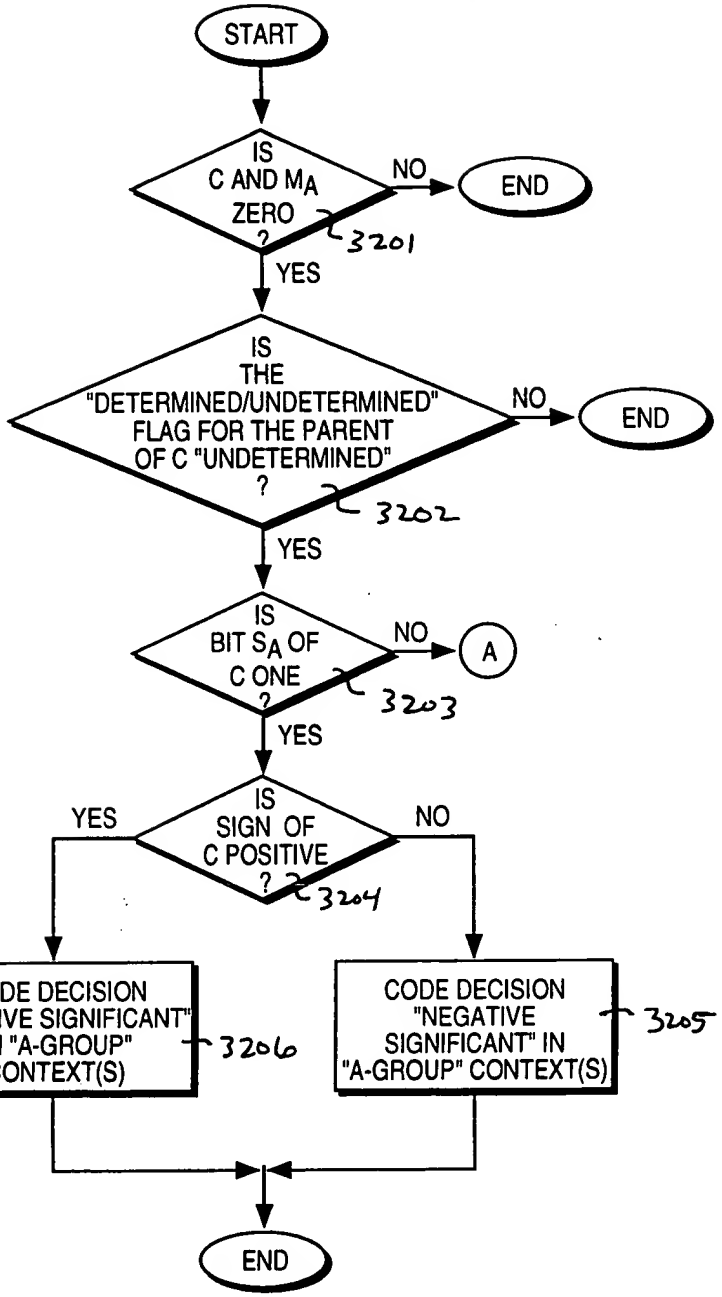

START
IS C AND $M_A$ ZERO ?
3201
NO
END
YES
IS THE "DETERMINED/UNDETERMINED" FLAG FOR THE PARENT OF C "UNDETERMINED" ?
3202
NO
END
YES
IS BIT $S_A$ OF C ONE ?
3203
NO
A
YES
IS SIGN OF C POSITIVE ?
3204
YES
NO
CODE DECISION "POSITIVE SIGNIFICANT" IN "A-GROUP" CONTEXT(S)
3206
CODE DECISION "NEGATIVE SIGNIFICANT" IN "A-GROUP" CONTEXT(S)
3205
END

FIG. 6b

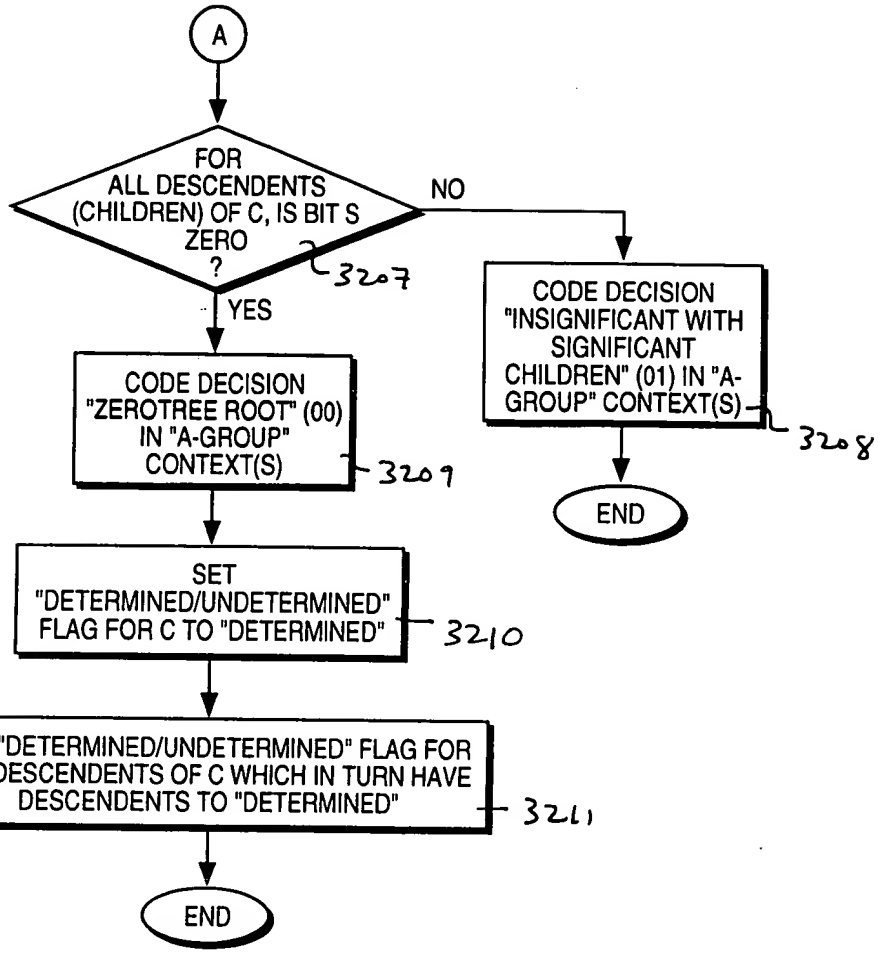

A
FOR ALL DESCENDENTS (CHILDREN) OF C, IS BIT S ZERO ?
3207
NO
YES
CODE DECISION "INSIGNIFICANT WITH SIGNIFICANT CHILDREN" (01) IN "A-GROUP" CONTEXT(S)
3208
END
CODE DECISION "ZEROTREE ROOT" (00) IN "A-GROUP" CONTEXT(S)
3209
SET "DETERMINED/UNDETERMINED" FLAG FOR C TO "DETERMINED"
3210
SET "DETERMINED/UNDETERMINED" FLAG FOR ALL DESCENDENTS OF C WHICH IN TURN HAVE DESCENDENTS TO "DETERMINED"
3211
END

**FIG. 6b** (cont'd.)

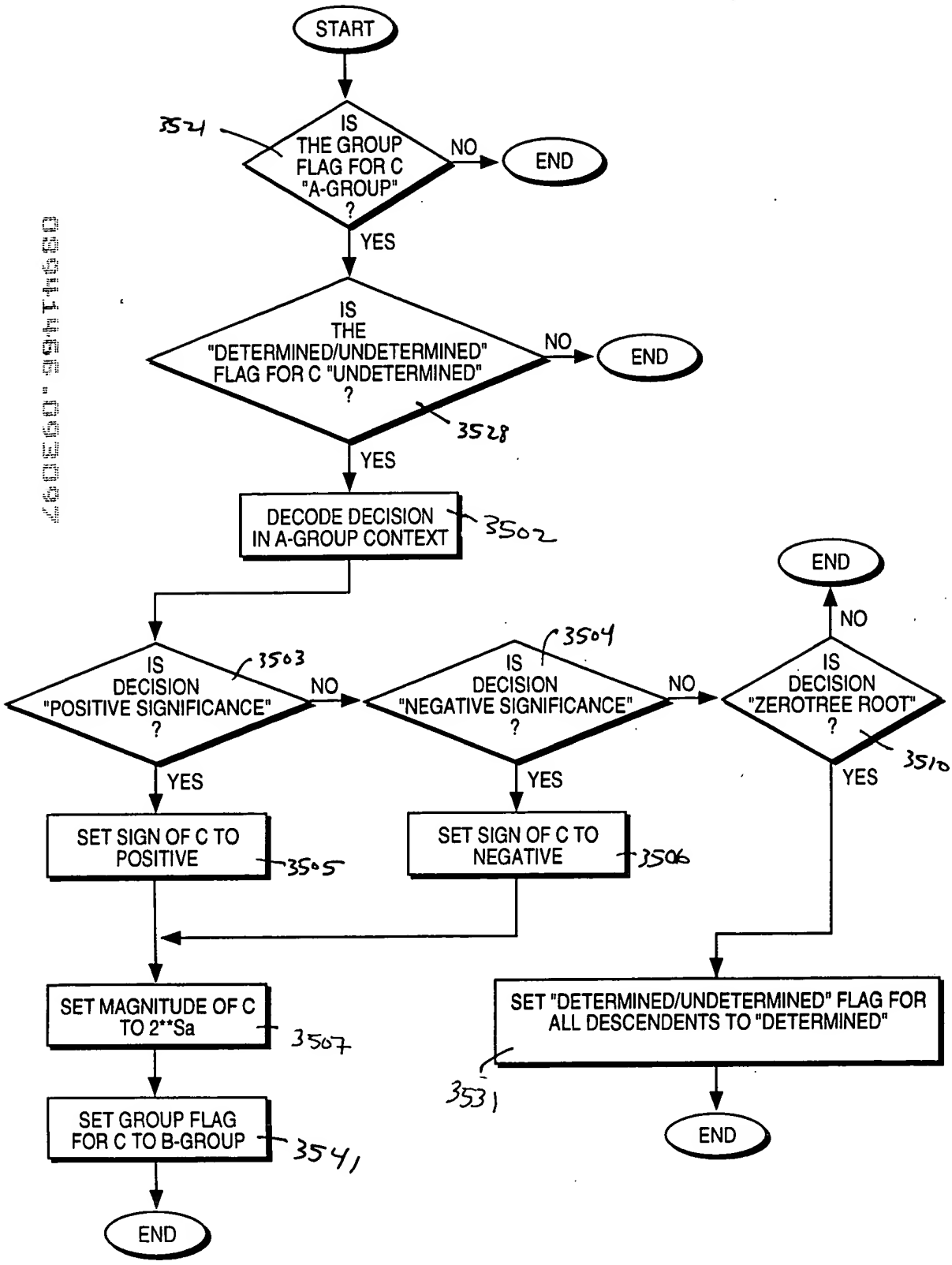

START
IS THE GROUP FLAG FOR C "A-GROUP" ?
3524
NO
END
YES
IS THE "DETERMINED/UNDETERMINED" FLAG FOR C "UNDETERMINED" ?
NO
END
3528
YES
DECODE DECISION IN A-GROUP CONTEXT
3502
IS DECISION "POSITIVE SIGNIFICANCE" ?
3503
NO
IS DECISION "NEGATIVE SIGNIFICANCE" ?
3504
NO
IS DECISION "ZEROTREE ROOT" ?
3510
NO
END
YES
SET SIGN OF C TO POSITIVE
3505
YES
SET SIGN OF C TO NEGATIVE
3506
YES
SET MAGNITUDE OF C TO 2**Sa
3507
SET GROUP FLAG FOR C TO B-GROUP
3541
END
SET "DETERMINED/UNDETERMINED" FLAG FOR ALL DESCENDENTS TO "DETERMINED"
3531
END

FIG. 6c

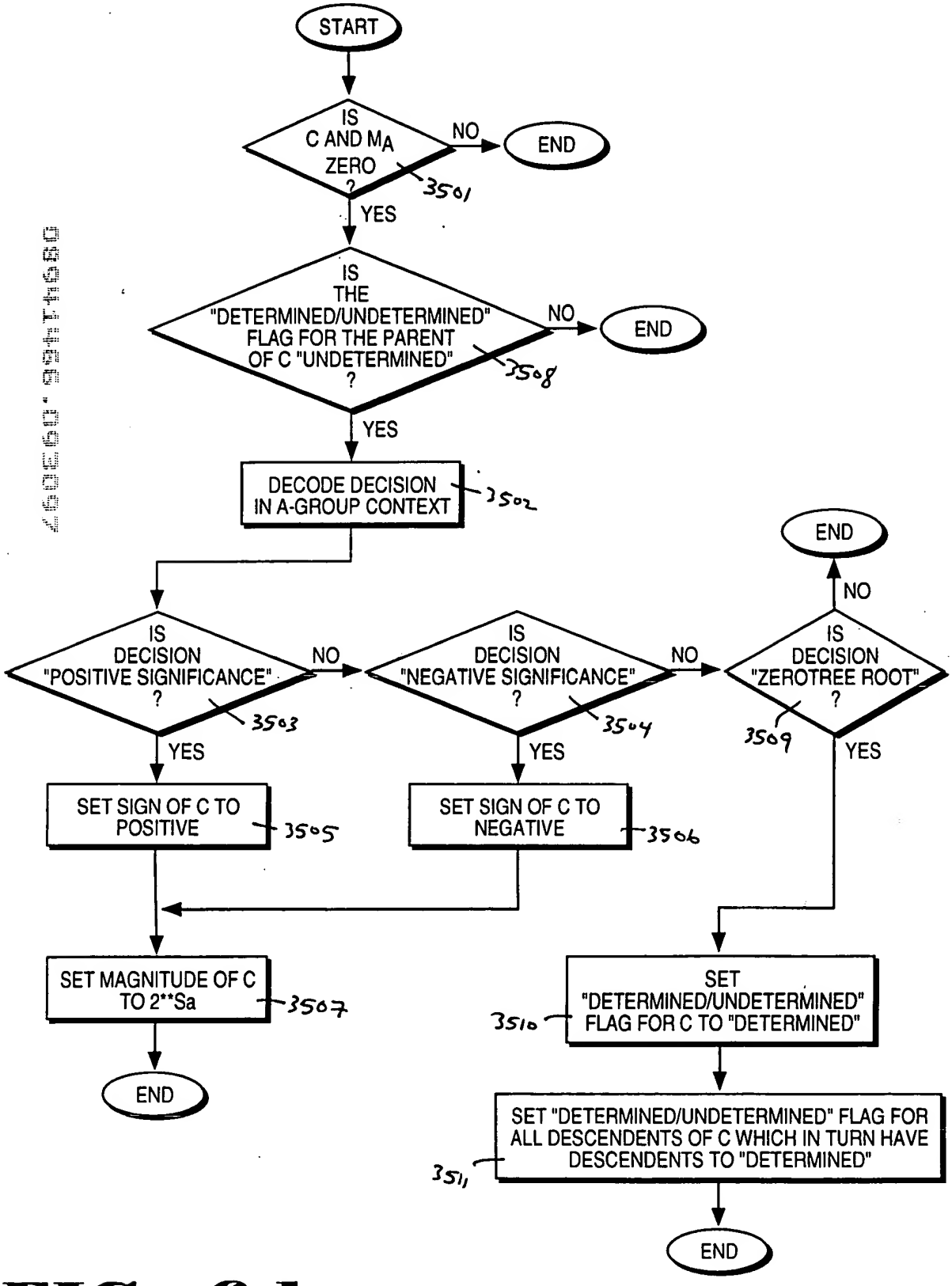

START
IS C AND MA ZERO ?
3501
NO
END
YES
IS THE "DETERMINED/UNDETERMINED" FLAG FOR THE PARENT OF C "UNDETERMINED" ?
3508
NO
END
YES
DECODE DECISION IN A-GROUP CONTEXT
3502
IS DECISION "POSITIVE SIGNIFICANCE" ?
3503
NO
IS DECISION "NEGATIVE SIGNIFICANCE" ?
3504
NO
IS DECISION "ZEROTREE ROOT" ?
3509
NO
END
YES
YES
YES
SET SIGN OF C TO POSITIVE
3505
SET SIGN OF C TO NEGATIVE
3506
SET MAGNITUDE OF C TO 2**Sa
3507
END
SET "DETERMINED/UNDETERMINED" FLAG FOR C TO "DETERMINED"
3510
SET "DETERMINED/UNDETERMINED" FLAG FOR ALL DESCENDENTS OF C WHICH IN TURN HAVE DESCENDENTS TO "DETERMINED"
3511
END

FIG. 6d

PRINT OF DRAWINGS
AS ORIGINALLY F



08/310141 09/30/98

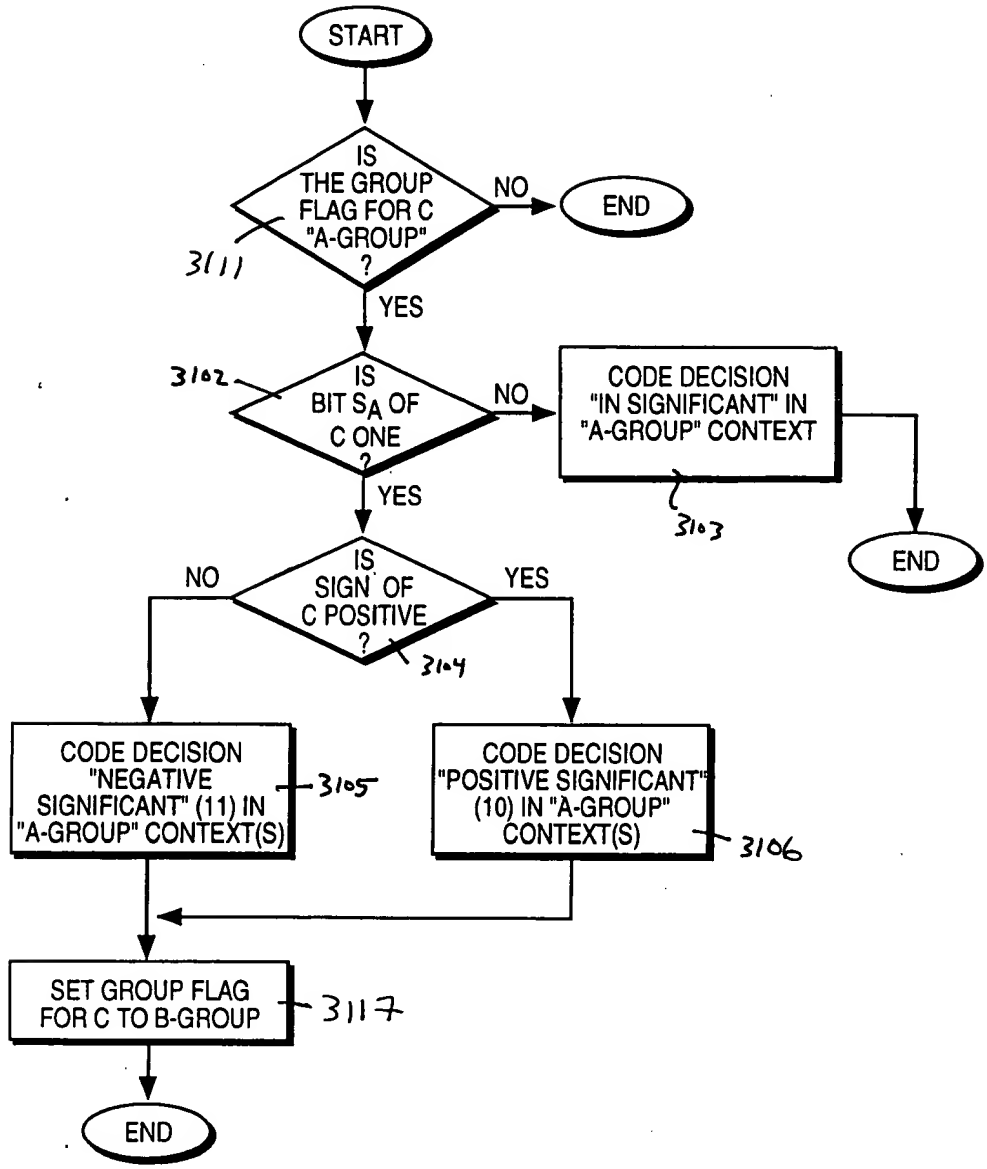



FIG. 7a

PRINT OF DRAWINGS
AS ORIGINALLY FT



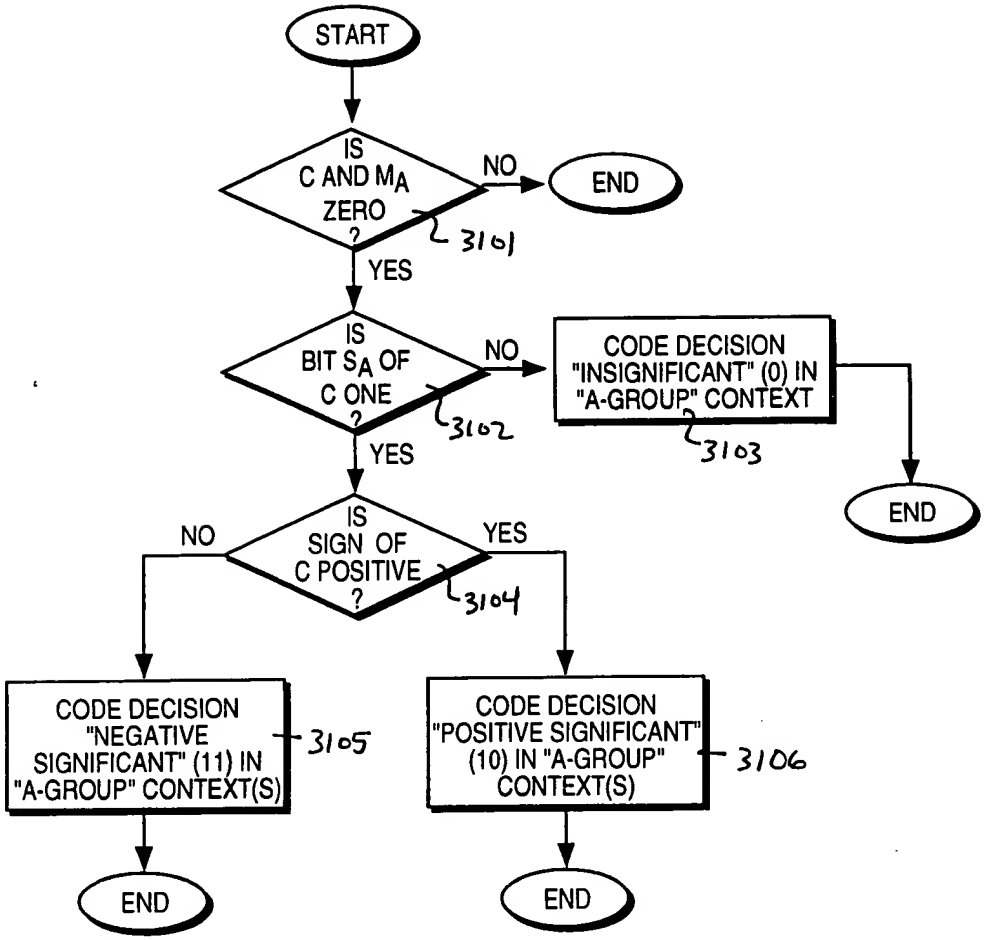



FIG. 7b

PRINT OF DRAWINGS
AS ORIGINALLY FI



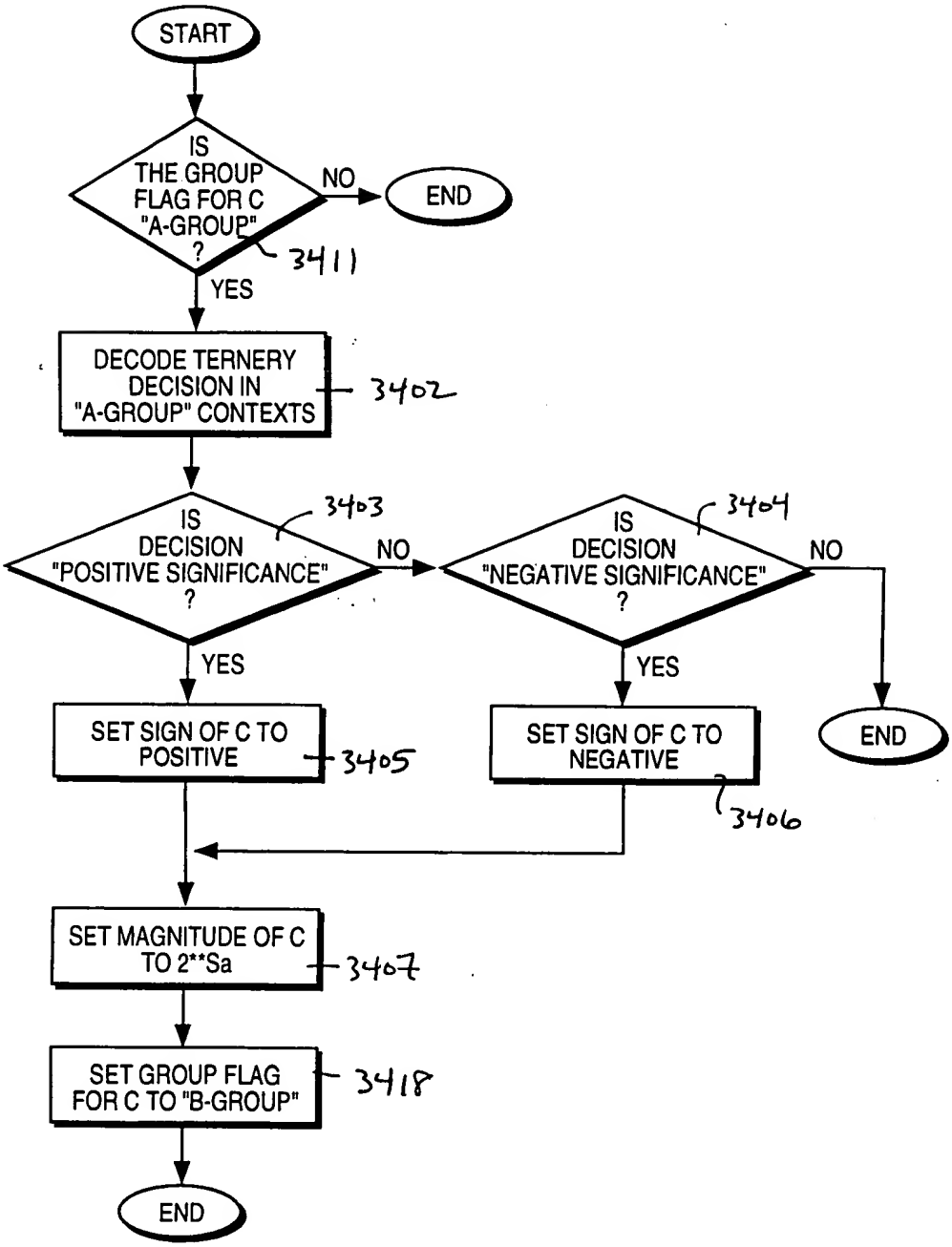



FIG. 7c

PRINT OF DRAWINGS
AS ORIGINALLY FI



08/310141 - 09/30/96

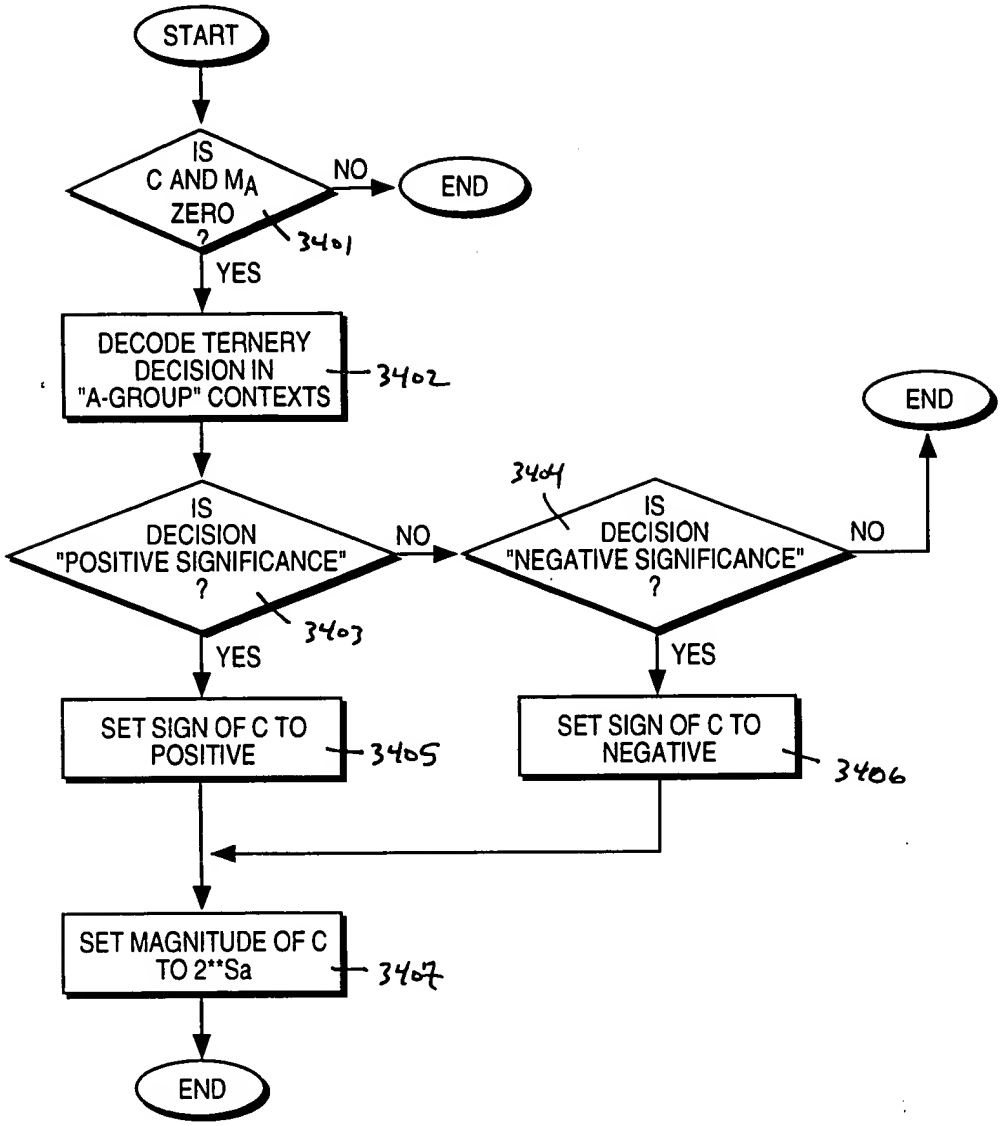



FIG. 7d

PRINT OF DRAWINGS
AS ORIGINALLY FI



09/310141 - 960503

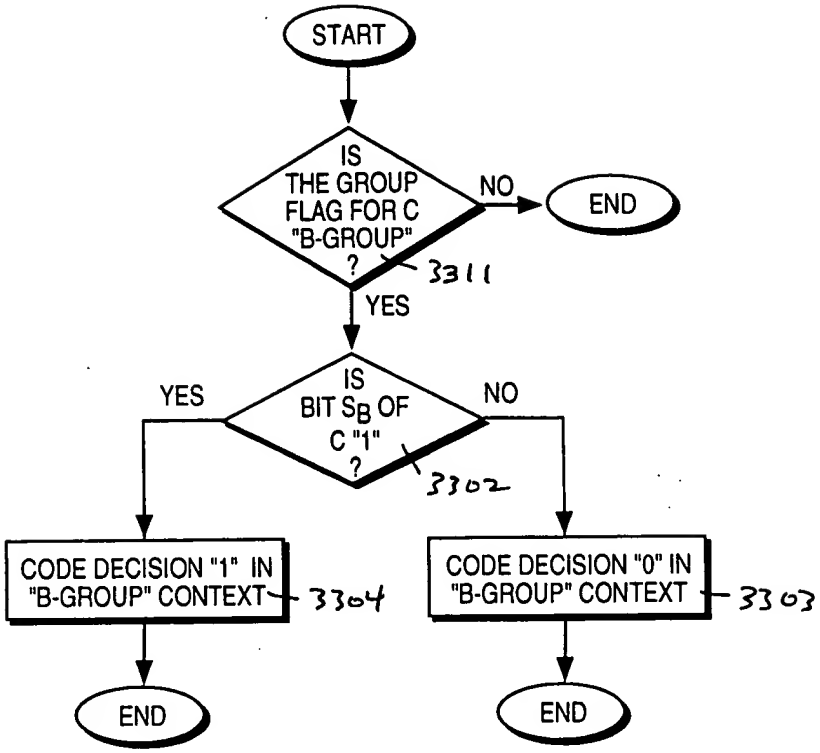



FIG. 8a

PRINT OF DRAWINGS
AS ORIGINALLY F



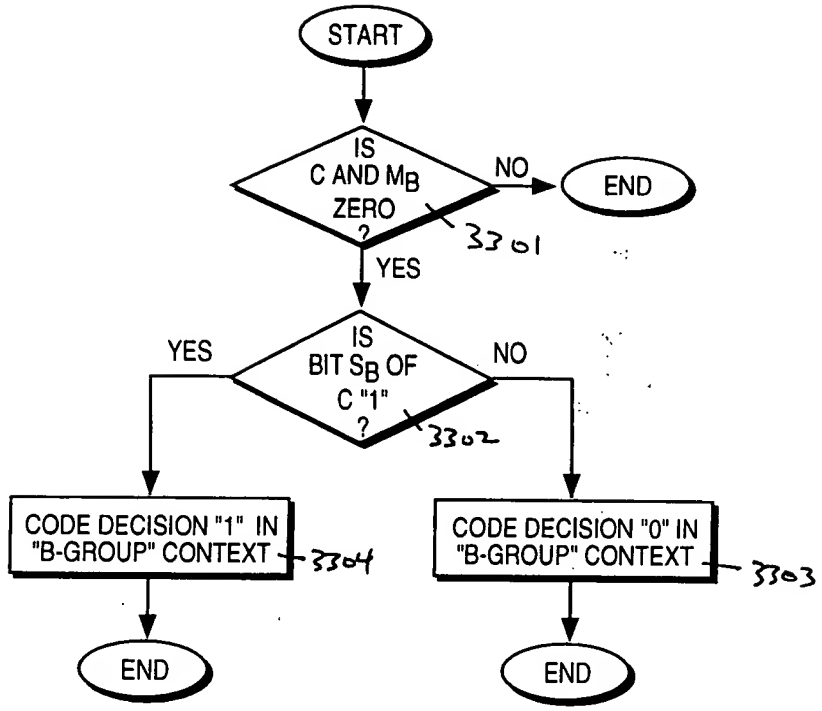



FIG. 8b

PRINT OF DRAWINGS
AS ORIGINALLY FI



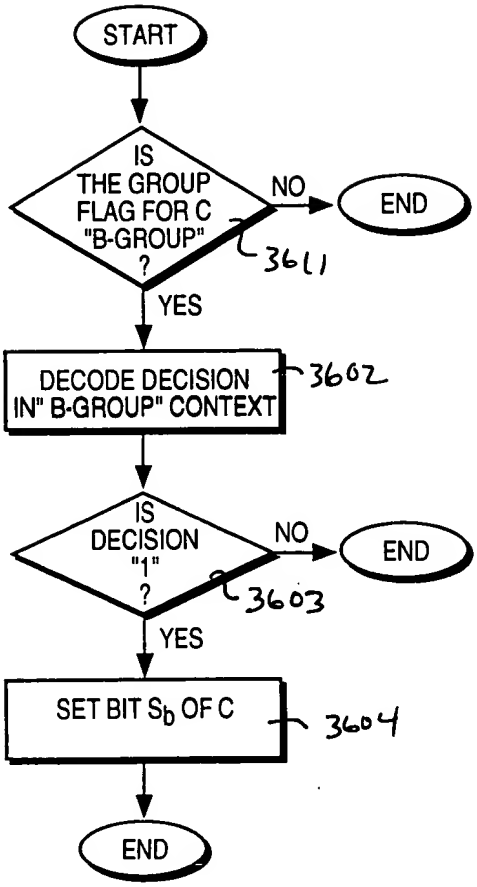



FIG. 9a

PRINT OF DRAWINGS
AS ORIGINALLY FI



08310141 - 960926

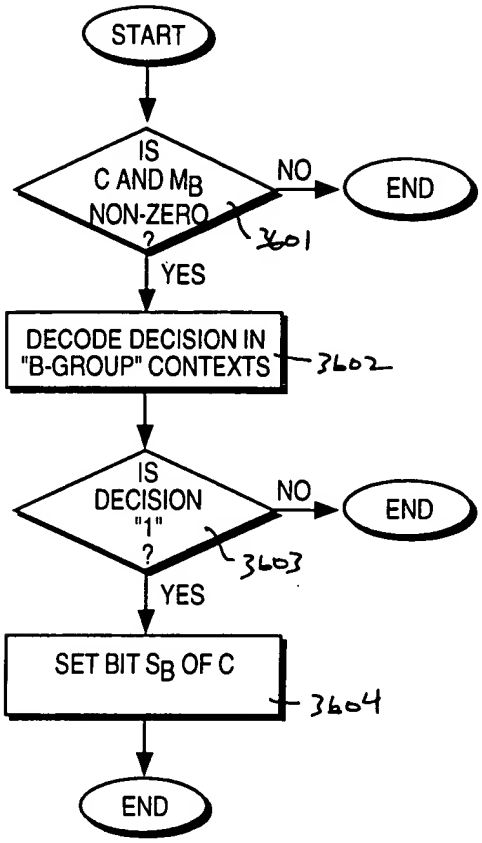



FIG. 9b

PRINT OF DRAWINGS
AS ORIGINALLY F



JC05 Rec'd PCT/PTO 23 SEP 1994

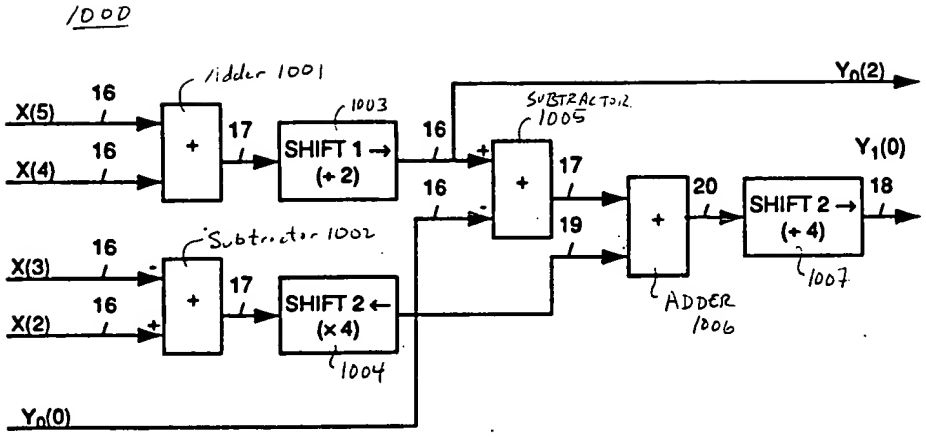



FIGURE 10

PRINT OF DRAWINGS
AS ORIGINALLY FT



JC05 Rec'd PCT/PTO 08 SEP 1998

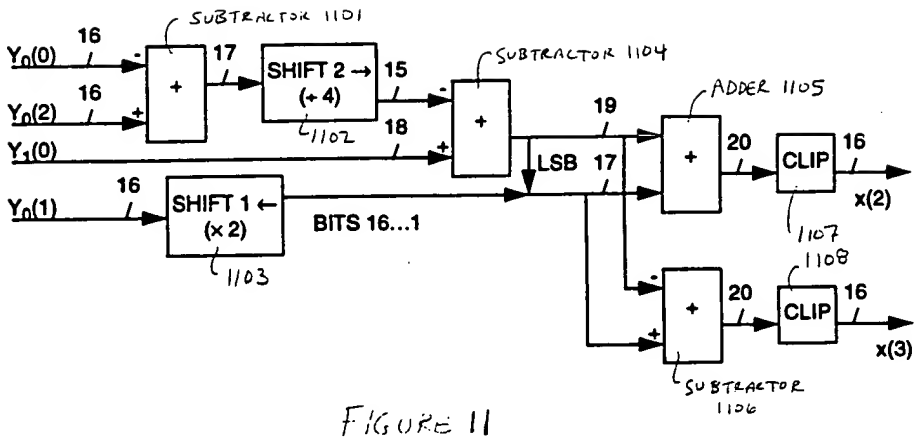



FIGURE 11

PRINT OF DRAWINGS
AS ORIGINALLY F[illegible]



20050 satt1g80

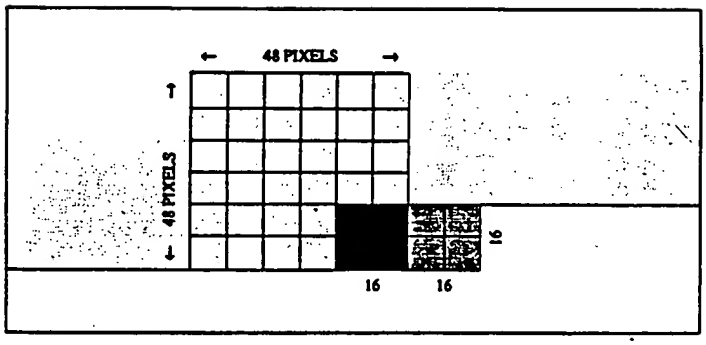



FIGURE 12

PRINT OF DRAWINGS
AS ORIGINALLY F



Substitute Sheet

Figure 13

PRINT OF DRAWINGS
AS ORIGINALLY F



"Express Mail" Label No. EM044150850US

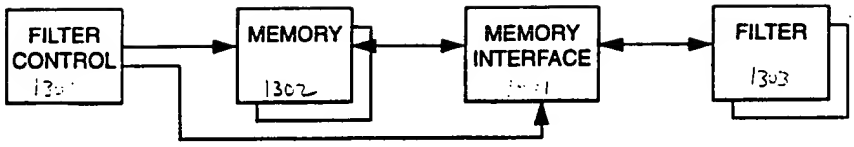



Figure 14

PRINT OF DRAWINGS
AS ORIGINALLY F



08/310141 '09/09/98

| | | | | | |
|---|---|---|---|---|---|
| 0 | 1 | 0 | 1 | 0 | 1 |
| 1 | 0 | 1 | 0 | 1 | 0 |
| 0 | 1 | 0 | 1 | 0 | 1 |
| 1 | 0 | 1 | 0 | 1 | 0 |
| 0 | 1 | 0 | 1 | 0 | 1 |
| 1 | 0 | 1 | 0 | 1 | 0 |

...

| | | | | | |
|---|---|---|---|---|---|
| 0 | 1 | 2 | 3 | 0 | 1 |
| 1 | 2 | 3 | 0 | 1 | 2 |
| 2 | 3 | 0 | 1 | 1 | 3 |
| 3 | 0 | 1 | 2 | 3 | 0 |
| 0 | 1 | 2 | 3 | 0 | 1 |
| 1 | 2 | 3 | 0 | 1 | 2 |

...

FIGURE 15

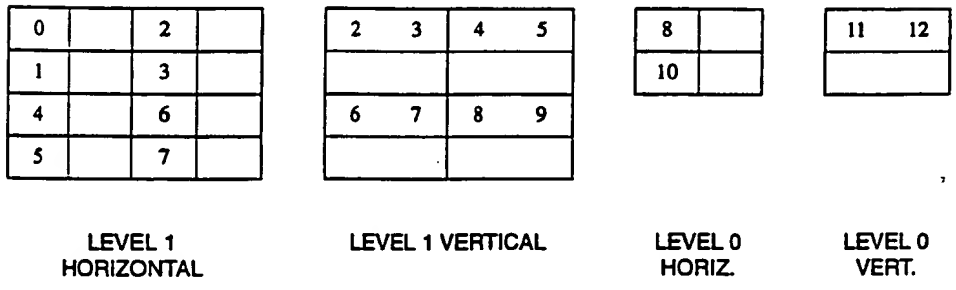



FIGURE 16

PRINT OF DRAWINGS
AS ORIGINALLY F



09/310141 - 05/26/99

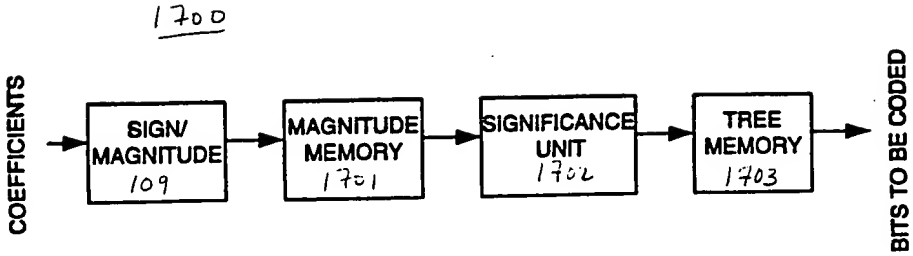



Figure 17

Copyright 1995 Intel Corporation

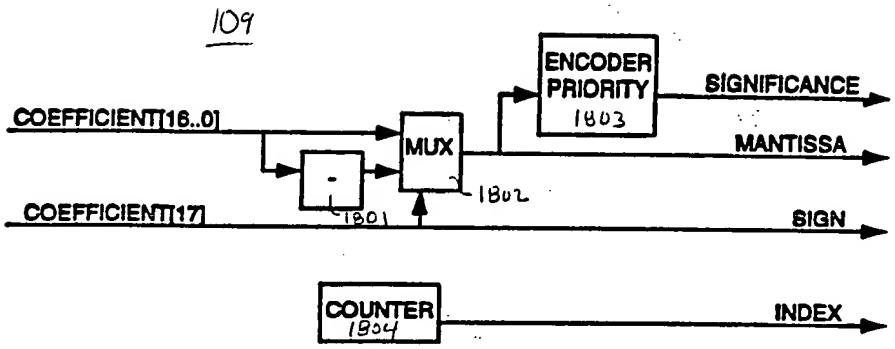



Figure 18

PRINT OF DRAWINGS
AS ORIGINALLY FI



09/310141 05/09/94

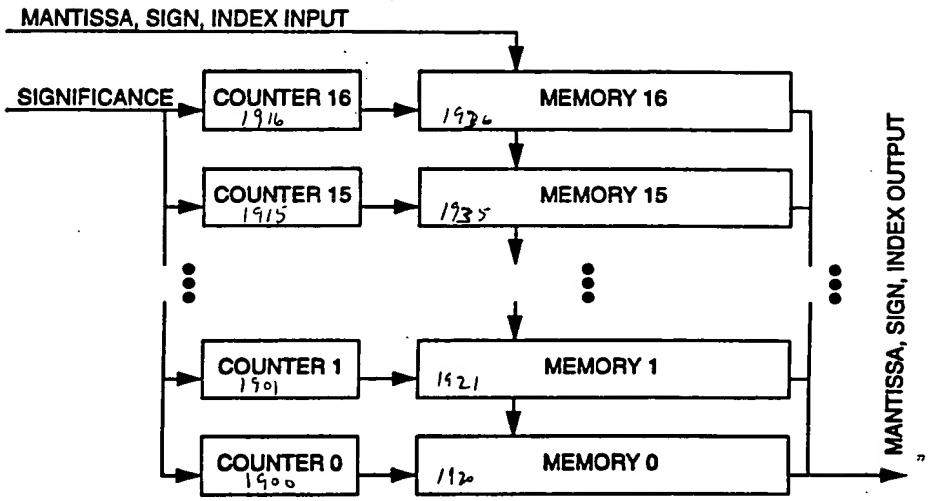


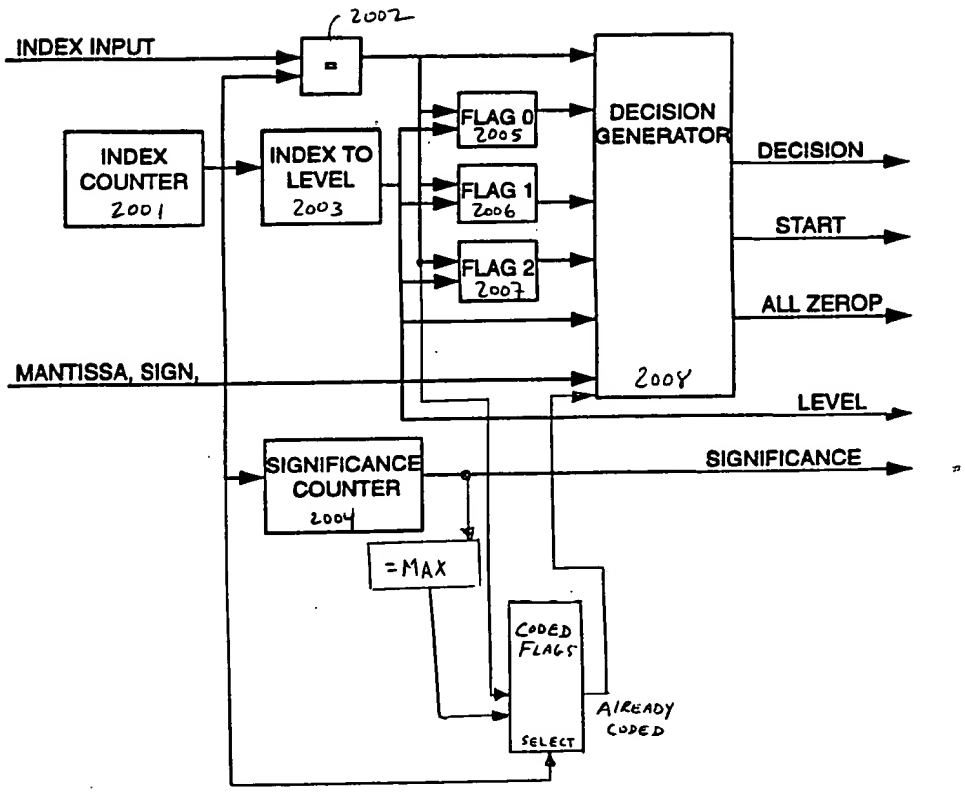

FIGURE 19

PRINT OF DRAWINGS
AS ORIGINALLY FI



09941956 "09/05/97

FIGURE 20



PRINT OF DRAWINGS
AS ORIGINALLY FILED



Copied - 09/14/2004

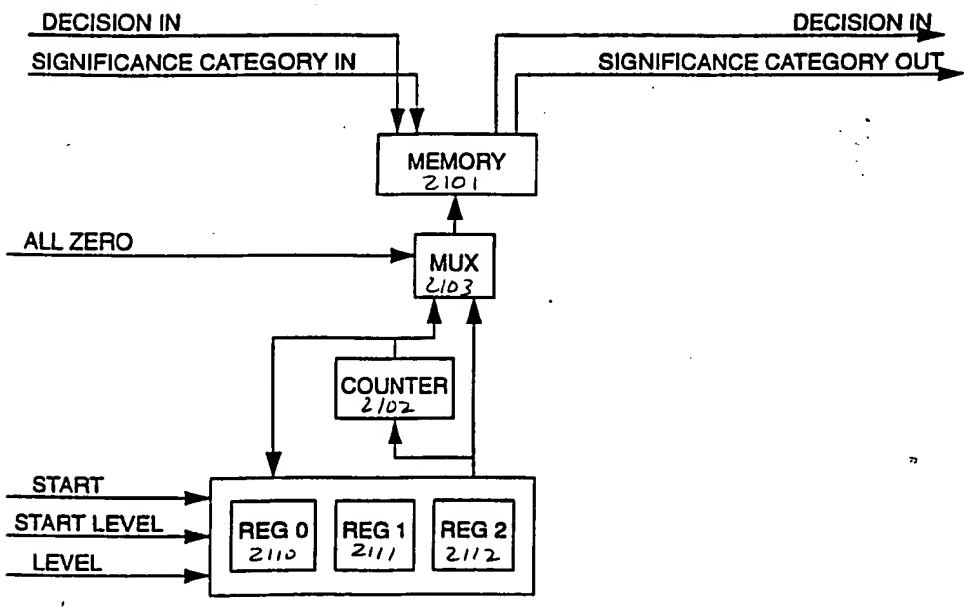



FIGURE 21

DEPARTMENT OF COMMERCE

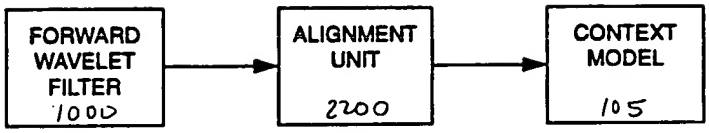



Figure 22

PRINT OF DRAWINGS
AS ORIGINALLY FI

08941965 - 08941965

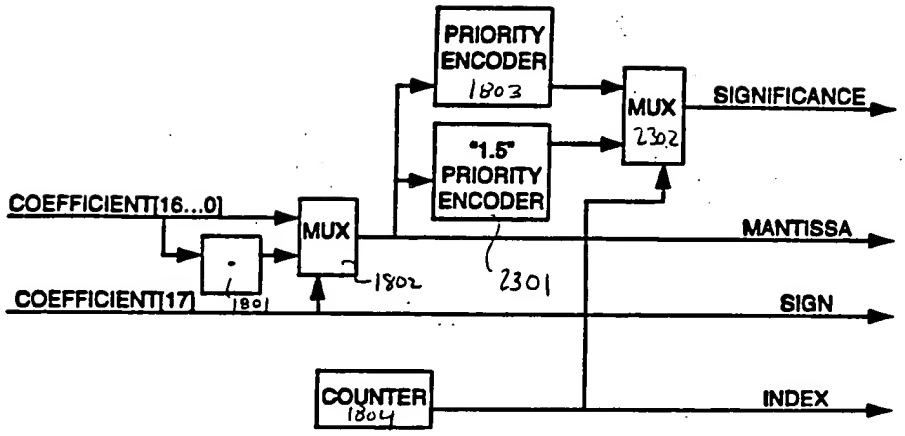



Figure 23

PRINT OF DRAWINGS
AS ORIGINALLY F



08310141 - 960926

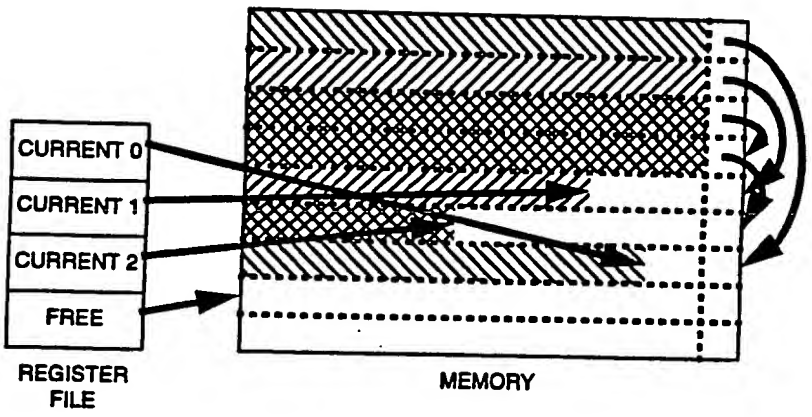



Figure 24

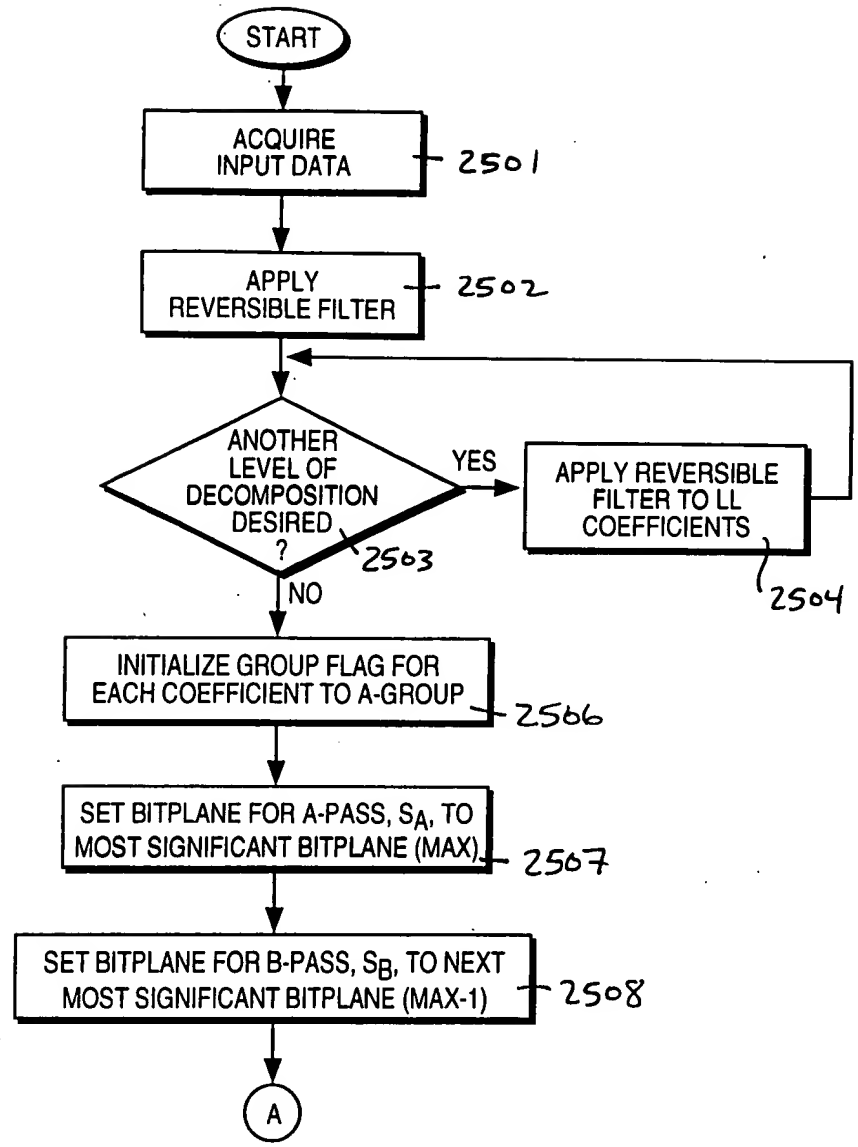

START
ACQUIRE INPUT DATA
2501
APPLY REVERSIBLE FILTER
2502
ANOTHER LEVEL OF DECOMPOSITION DESIRED ?
2503
YES
APPLY REVERSIBLE FILTER TO LL COEFFICIENTS
2504
NO
INITIALIZE GROUP FLAG FOR EACH COEFFICIENT TO A-GROUP
2506
SET BITPLANE FOR A-PASS, $S_A$, TO MOST SIGNIFICANT BITPLANE (MAX)
2507
SET BITPLANE FOR B-PASS, $S_B$, TO NEXT MOST SIGNIFICANT BITPLANE (MAX-1)
2508
A

FIG. 25a

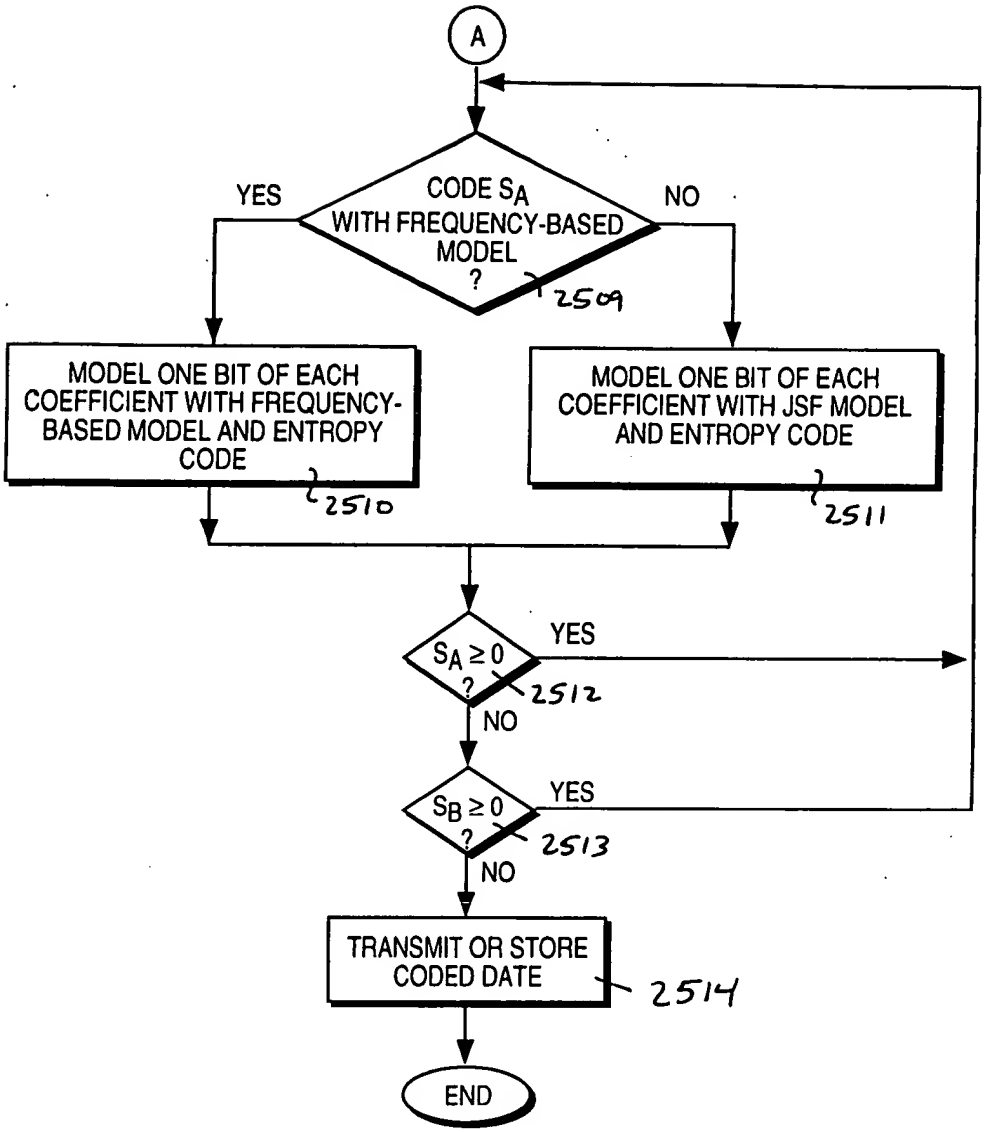

A
CODE $S_A$ WITH FREQUENCY-BASED MODEL ?
2509
YES
NO
MODEL ONE BIT OF EACH COEFFICIENT WITH FREQUENCY-BASED MODEL AND ENTROPY CODE
2510
MODEL ONE BIT OF EACH COEFFICIENT WITH JSF MODEL AND ENTROPY CODE
2511
$S_A \geq 0$ ?
2512
YES
NO
$S_B \geq 0$ ?
2513
YES
NO
TRANSMIT OR STORE CODED DATE
2514
END

FIG. 25b

PRINT OF DRAWINGS
AS ORIGINALLY F

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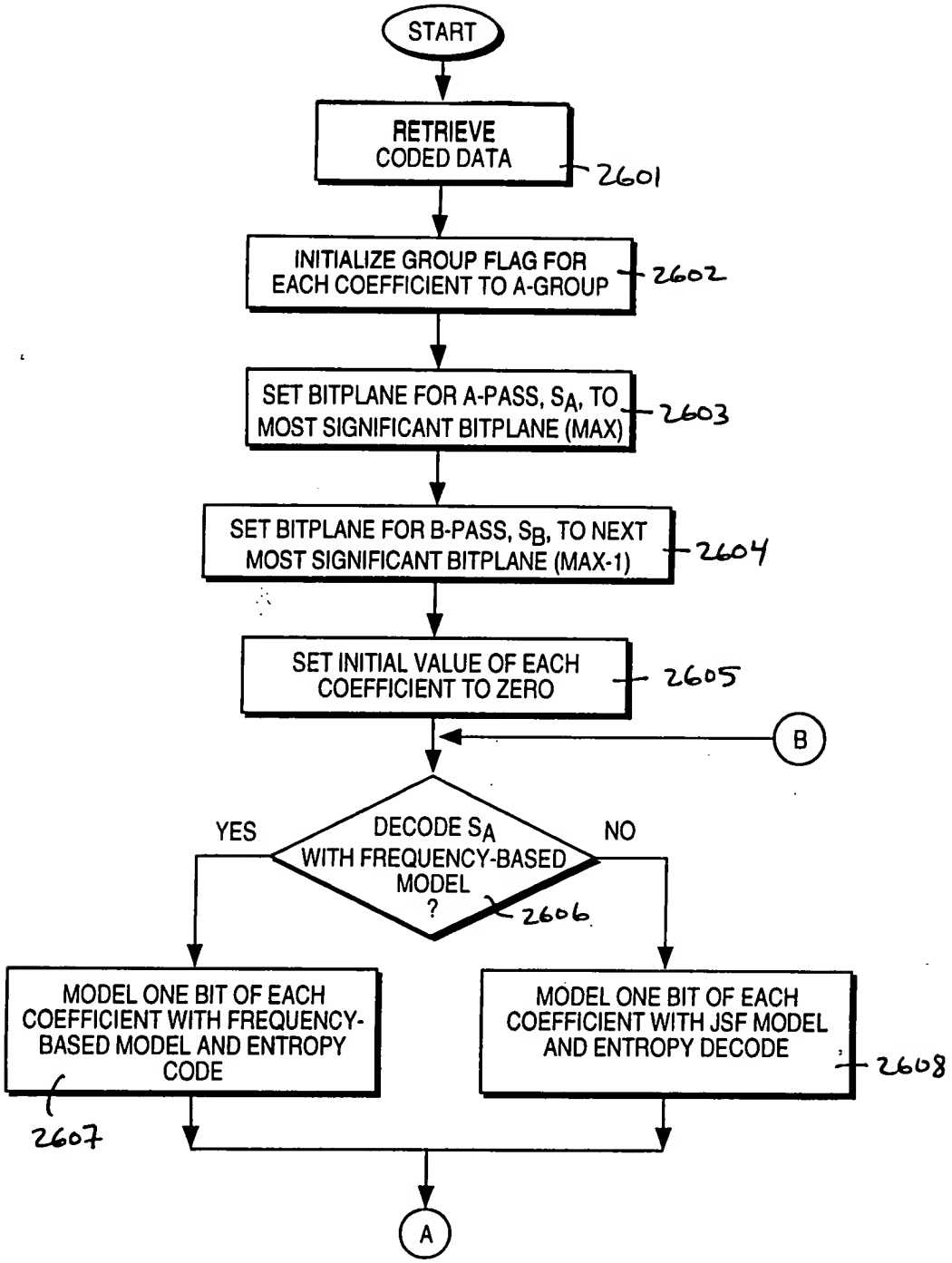


FIG. 26a

PRINT OF DRAWINGS
AS ORIGINALLY F



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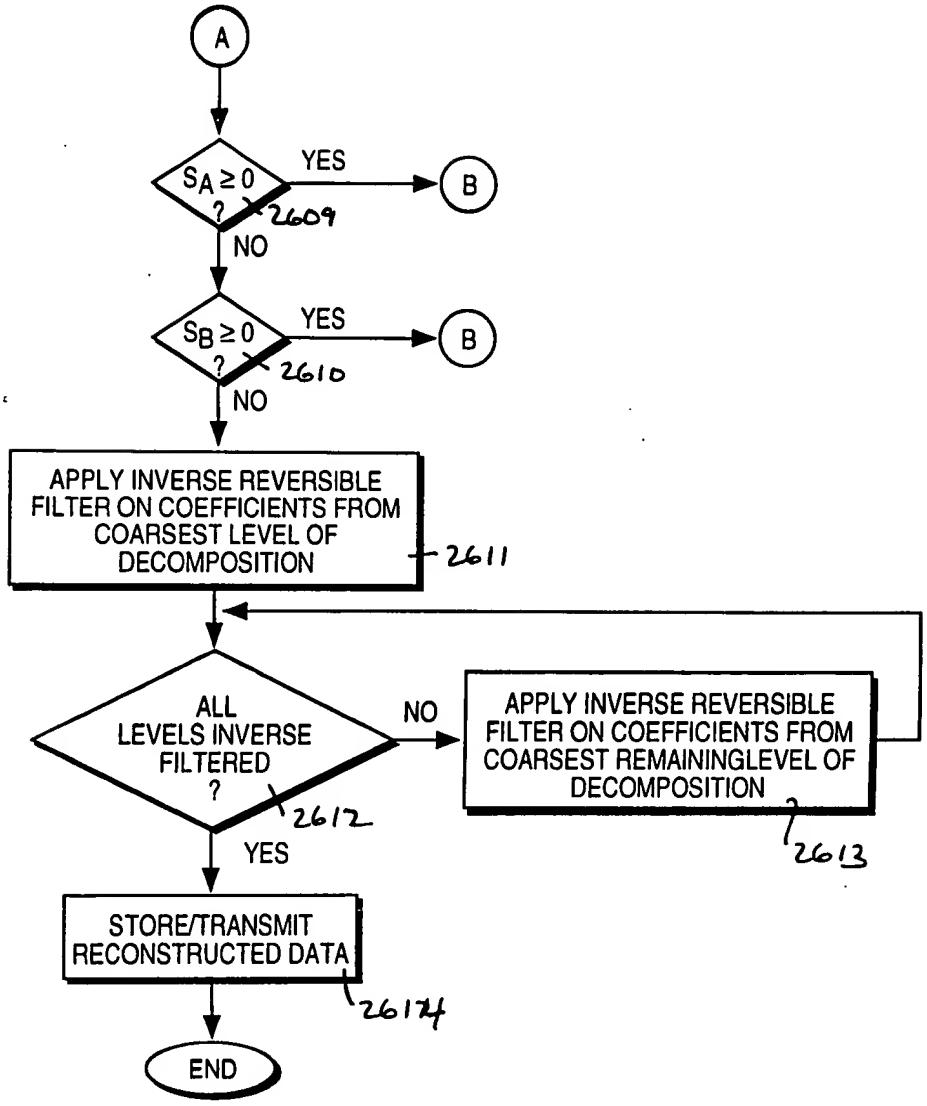


FIG. 26b

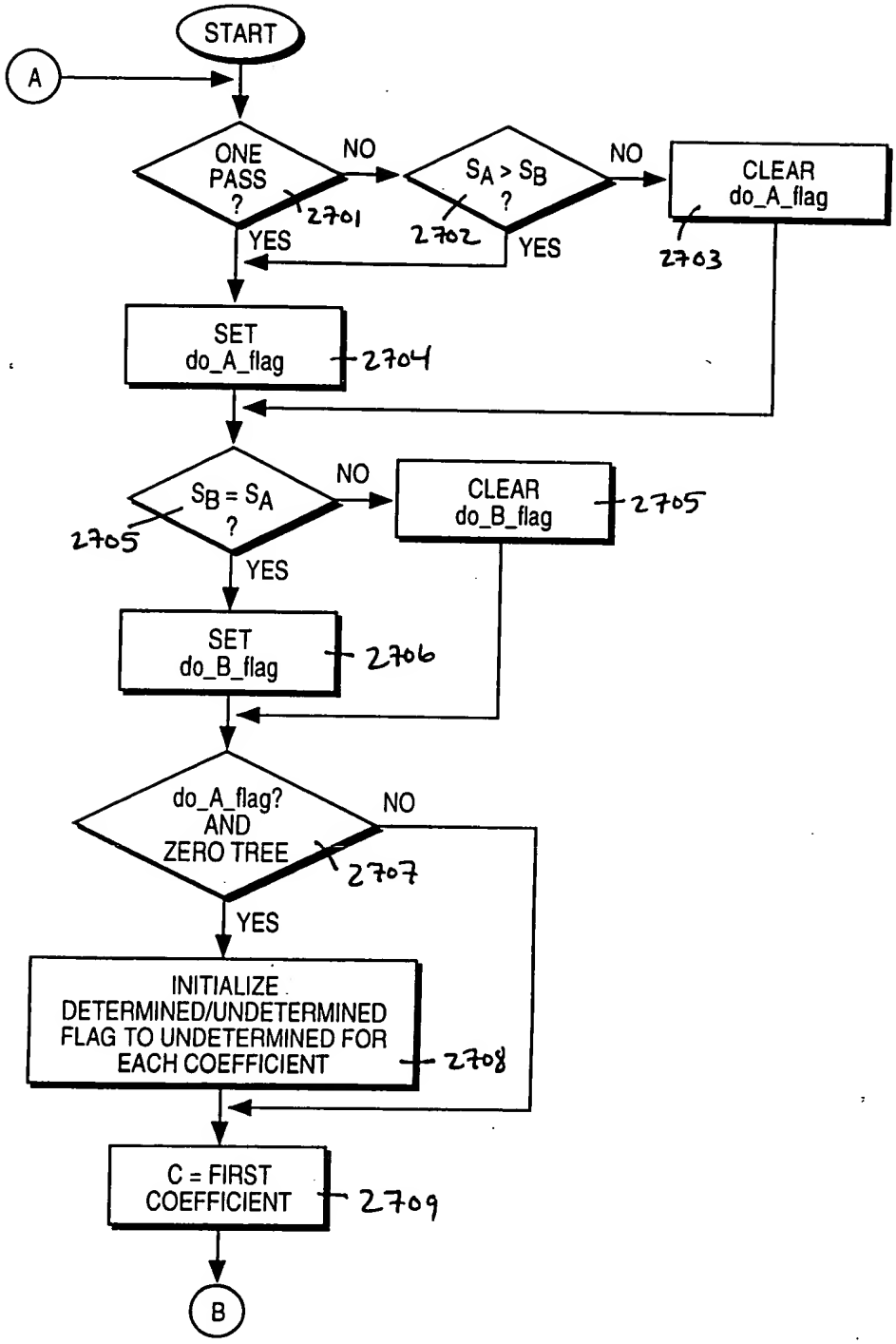
START
A
ONE PASS ?
2701
NO
YES
$S_A > S_B$ ?
2702
NO
YES
CLEAR do_A_flag
2703
SET do_A_flag
2704
$S_B = S_A$ ?
2705
NO
YES
CLEAR do_B_flag
2705
SET do_B_flag
2706
do_A_flag? AND ZERO TREE
2707
NO
YES
INITIALIZE DETERMINED/UNDETERMINED FLAG TO UNDETERMINED FOR EACH COEFFICIENT
2708
C = FIRST COEFFICIENT
2709
B

FIG. 27a

PRINT OF DRAWINGS
AS ORIGINALLY F



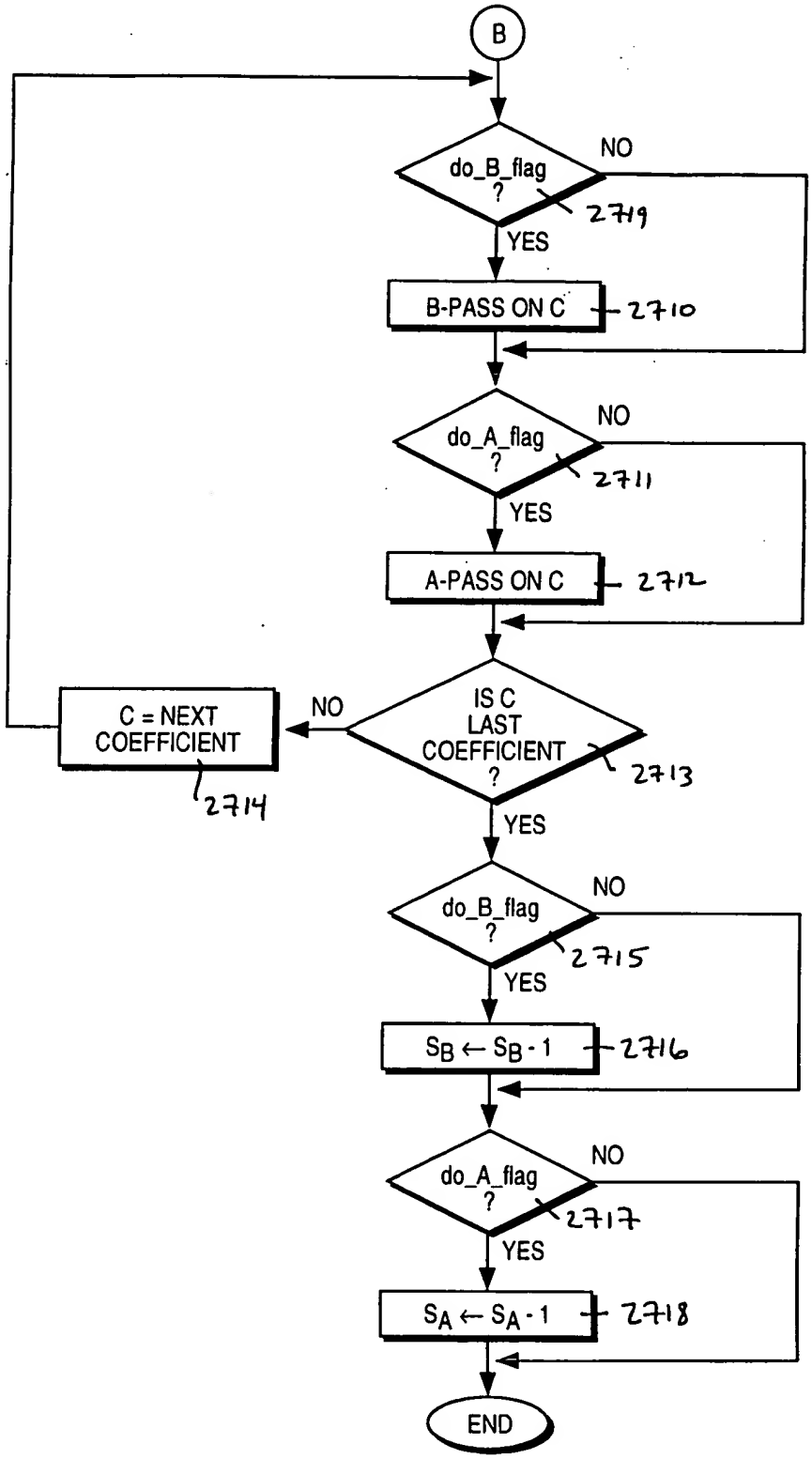


FIG. 27b

PRINT OF DRAWINGS
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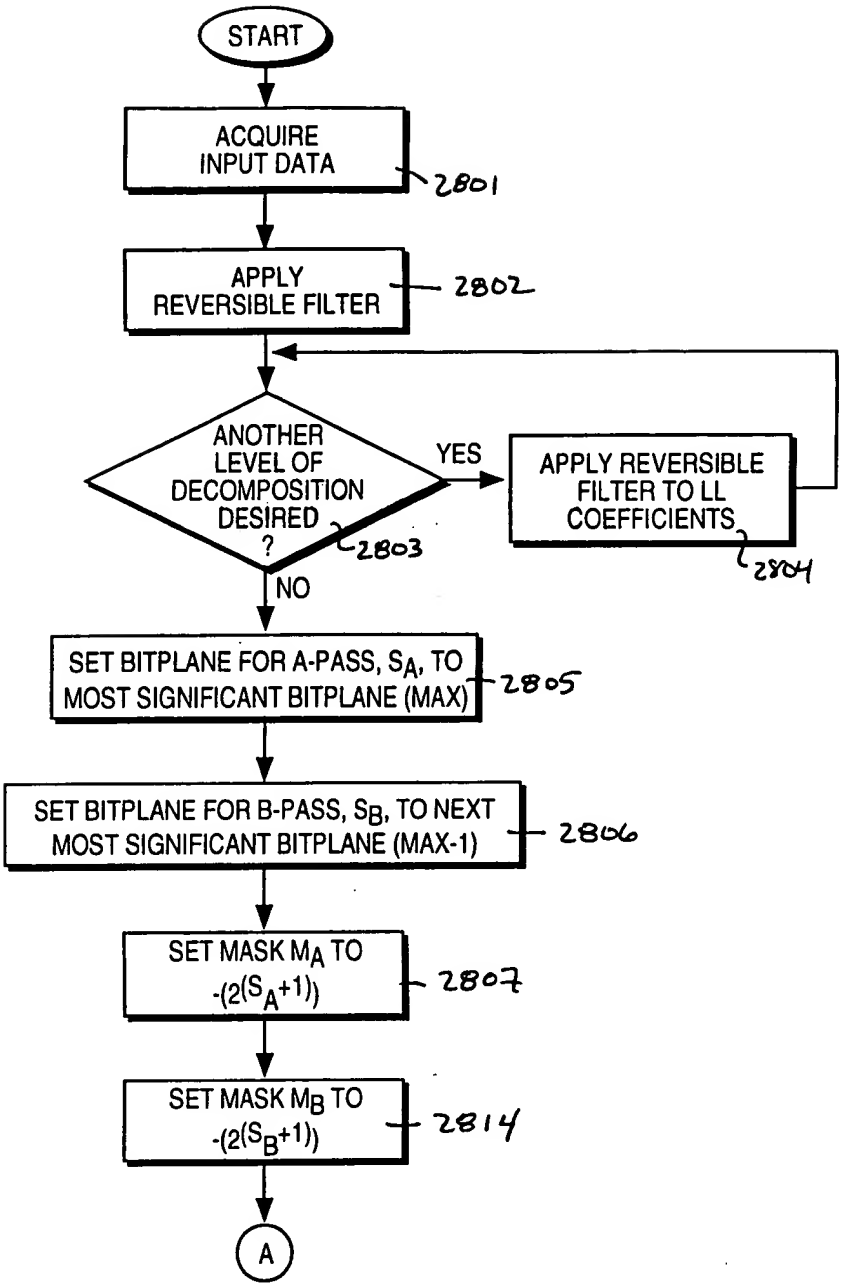


FIG. 28a

PRINT OF DRAWINGS
AS ORIGINALLY FI



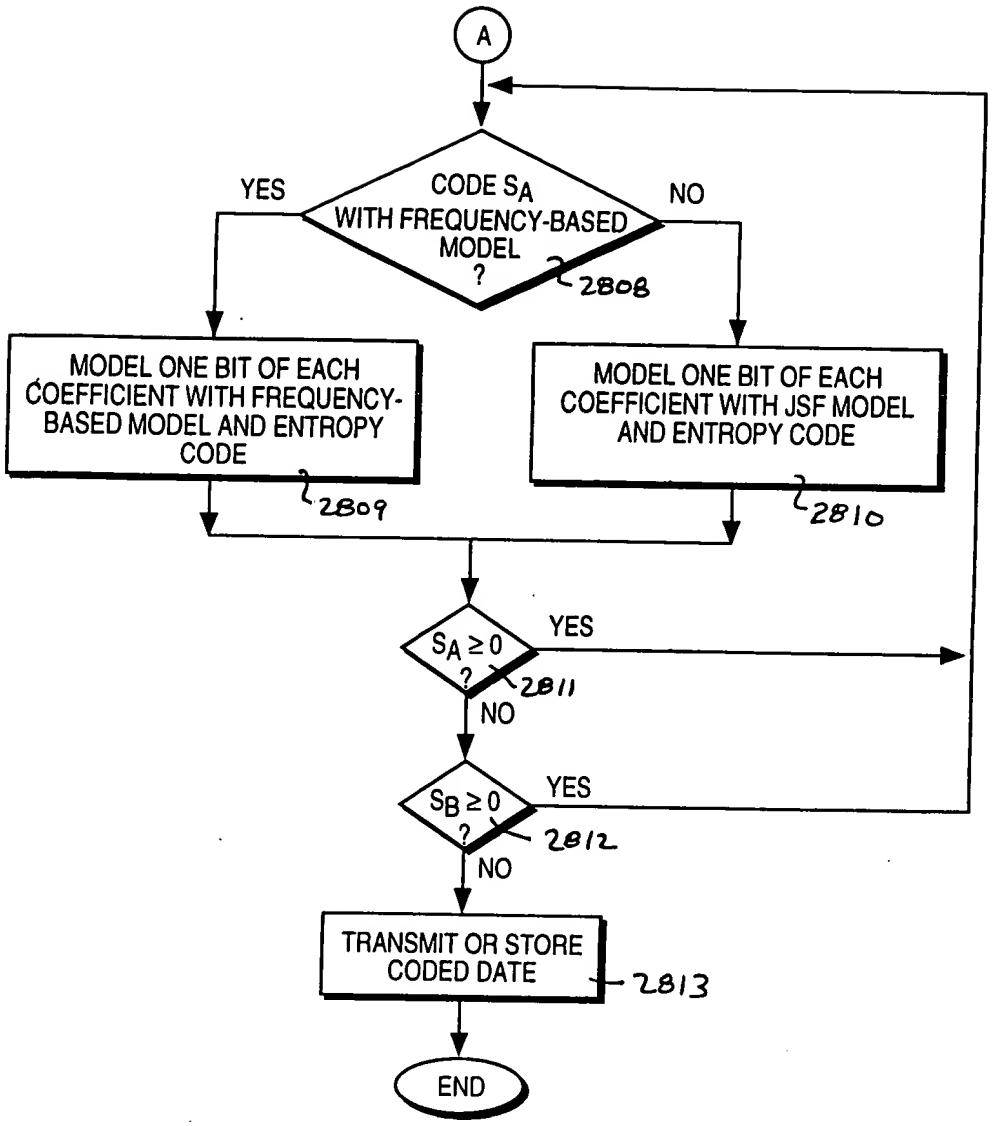


FIG. 28b

PRINT OF DRAWINGS
AS ORIGINALLY FI



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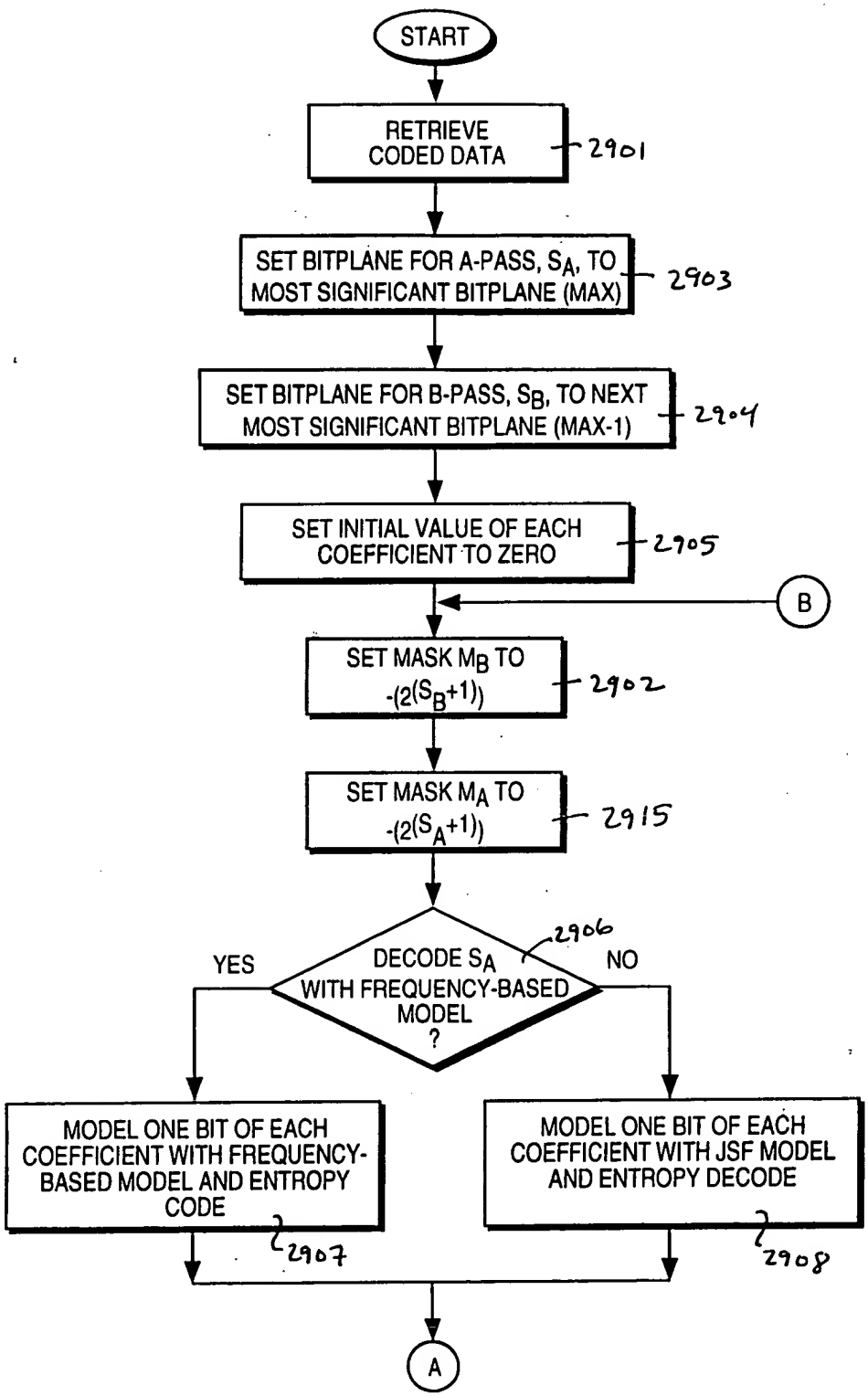


FIG. 29a

PRINT OF DRAWINGS
AS ORIGINALLY FI



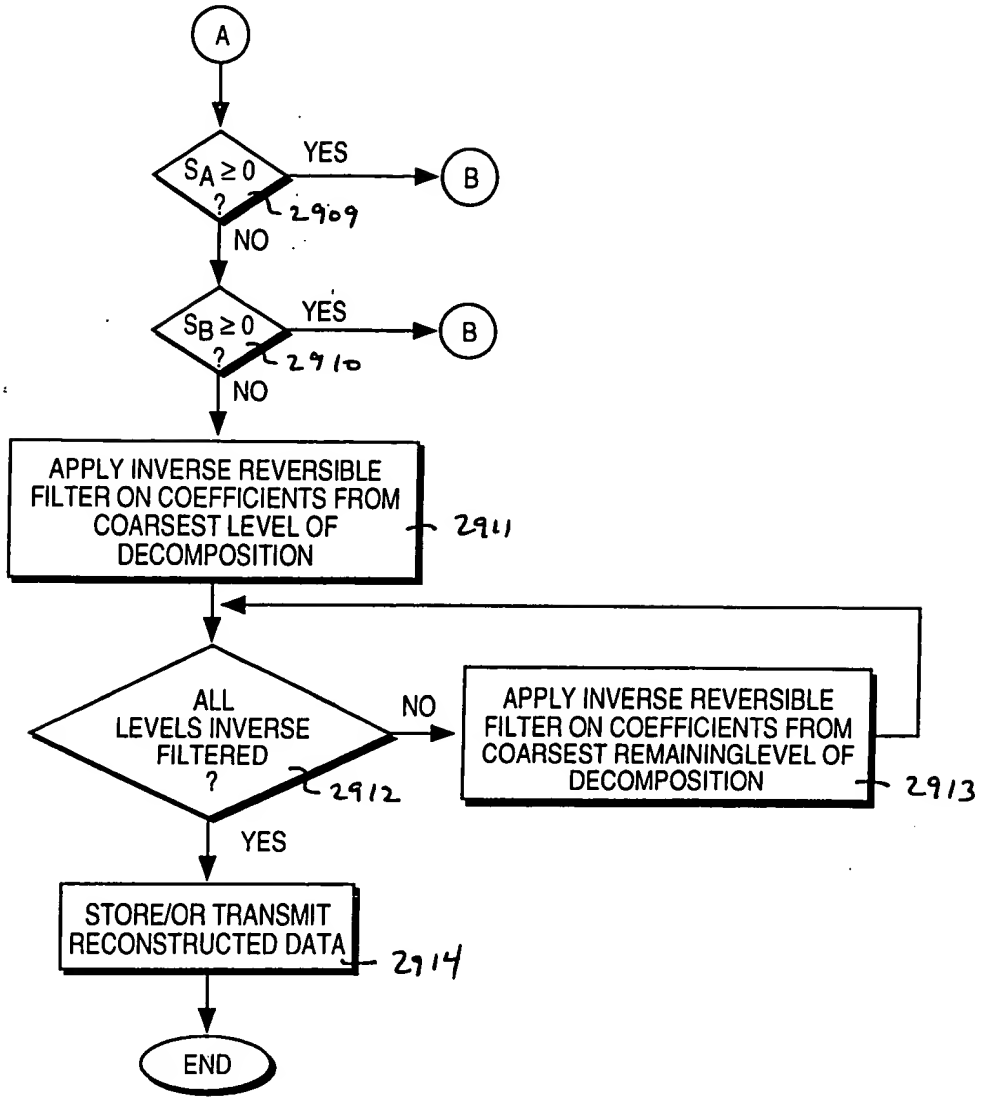


FIG. 29b

PRINT OF DRAWINGS
AS ORIGINALLY F

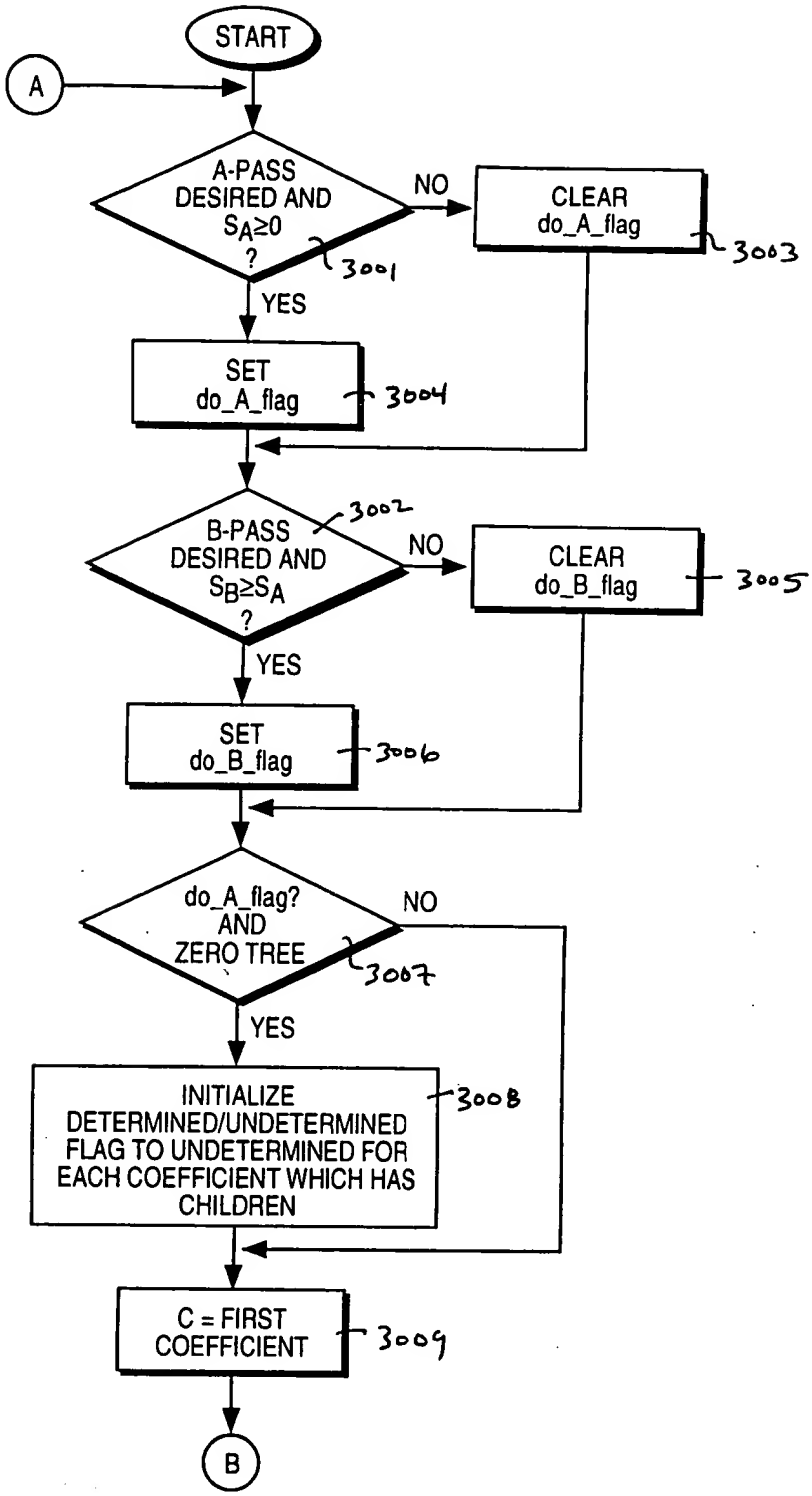


FIG. 30a

PRINT OF DRAWINGS
AS ORIGINALLY F



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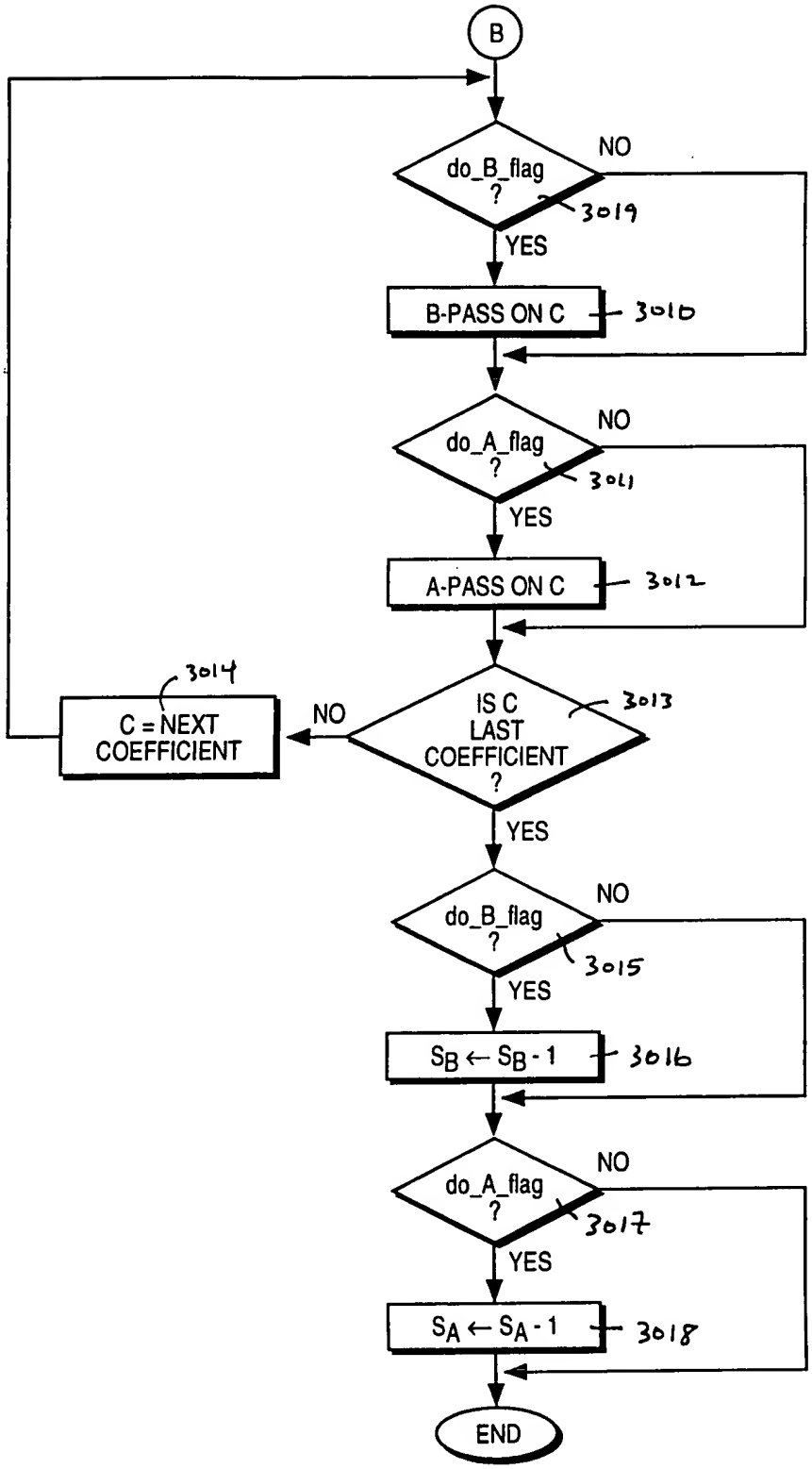


FIG. 30b

PRINT OF DRAWINGS
AS ORIGINALLY F



Scotch Brand

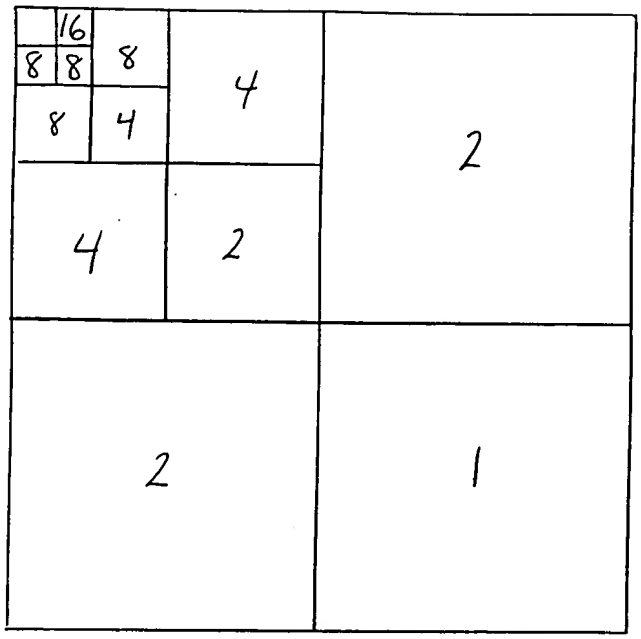


FIGURE 31